



## MEMORANDUM

TO: Ms. Sharon Newlon REF. NO.: 042192-03

FROM: Garth Daley/ko/22 DATE: May 31, 2006

C.C.: RRG/Clayton Site Technical Committee  
J. Weinberger  
P. Harvey  
R. Shepherd  
B. Schloessler

RE: **Status Report #7 for the Resource Recovery Group/Clayton Chemical Company Site**

This Status Report is being submitted to the United States Environmental Protection Agency (U.S. EPA) and its designated On-Scene Coordinator (OSC) Kevin Turner in accordance with Section VIII, Condition 19.a. of the Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action for the Resource Recovery Group/Clayton Chemical Soils (RRG/Clayton) Site dated October 28, 2005. The reporting period for this seventh Monthly Status Report is April 24, 2006, through May 19, 2006.

### **EFFECTIVE DATE**

On November 1, 2005, Ms. Sharon Newlon, the acting counsel for the RRG/Clayton Site Potentially Responsible Party Group (the Respondents), received the AOC. In accordance with Section XXVIII, Condition 76 of the AOC, this date represented the Effective Date for the AOC and started the compliance time clock for the Removal Action. Status Report #6 was submitted to U.S. EPA on April 28, 2006.

### **1.0 COMPLETED ACTIVITIES**

#### **1.1 Pre-Mobilization, Mobilization And Removal Activities Completed To Date**

The primary activities that have been completed at the RRG/Clayton Site since the submission of Status Report #6 have centered on the shipment of waste materials for offsite disposal. Additionally, some activities related to the soil excavation and investigation activities presented in the removal Action Work Plan have also been performed. A weekly summary of activities appears below.

- During the week of April 24, 2006, Brandenburg Industrial Services Company (BISCo) shipped approximately 865.5 tons of soils recovered from the excavation of the U.S. EPA test pit #44 location to Milam Landfill in East St. Louis, Illinois for disposal. These materials were shipped on April 24 and 25, 2006, in a total of 33 loads. BISCo also excavated approximately 70 cubic yards (yd<sup>3</sup>) of soils from the northwest portion of the tank farm area for tanks 11 through 14 on April 28, 2006. This excavation took place at the GC investigation location and stemmed from the investigation requested by OSC Kevin



Turner during his March 28, 2006, Site Visit. BISCo/EQIS collected confirmatory sidewall samples from the completed excavation and submitted them for analysis;

- For the week of May 1, 2006, the primary Site related activities consisted of BISCo continuing to uncover underground process piping at the northwestern portion of the EZ4 Work Zone and the southwestern portion of the EZ5 Work Zone ( May 1, 2006); BISCo and CRA exploring potential treatment and/or disposal options for the mixed hazardous soils (soils having both a Resource Conservation and Recovery Act [RCRA] and Toxic Substance Control Act [TSCA] characteristic); and BISCo and CRA continued making the requisite preparations to ship drummed and bulked hazardous solids offsite for disposal. Due to lull in Site activities due to the waste approval process, BISCo personnel were demobilized from the Site prior to the end of the week;
- During the week of May 8, 2006, BISCo continued waste shipment activities by shipping drums of hazardous and non-hazardous solids, in addition to shipping bulked tank solids, for offsite disposal. BISCo and CRA also continued their efforts to determine the best option for managing the mixed waste that were excavated from the eastern portion of the Site. Towards that goal, 4 1-liter samples and 1 4-ounce sample of these materials were collected on May 9, 2006 by BISCo and CRA and submitted for use in a treatability study. The purpose of this study was to assess the potential for chemical oxidation treatment methods to remove/reduce the concentrations of volatile organic substances in the soils to facilitate their future disposal as a TSCA/polychlorinated biphenyl [PCB]-containing waste stream. A load of 82 drums (approximately 23 yd<sup>3</sup>) of drummed wastes were shipped to the EQ Detroit facility via closed box truck on May 10, 2006. On May 12, 2006, BISCo shipped 5 30- yd<sup>3</sup> roll boxes containing approximately 44 yd<sup>3</sup> materials from tank 13 to the neighboring Veolia (formerly Onyx) Environmental, Inc. Trade Waste Incinerator (TWI) facility for disposal; and
- Waste shipment activities and continued research into possible treatment/disposal options to address the mixed waste soils were the main activities performed during the week of May 15, 2006. On May 15, 2006, BISCo shipped the final 2 loads (16 yd<sup>3</sup>) of tank 13 materials to the Veolia TWI facility. BISCo loaded the contents of tank B2 (approximately 9 yd<sup>3</sup> of material) into a roll off for future shipment (material was shipped on Wednesday, May 24, 2006) to the Veolia TWI facility on May 17, 2006. BISCo also prepared the tank carcass for future offsite recycling on that date. In preparation for disposal at the TWI facility, BISCo loaded several boxes of waste characterization samples found in the Waste Drum Storage Building into 6 1-yd<sup>3</sup> on May 19, 2006.

Additional details of the completed activities, including Site maps, are provided in the form of the Weekly Summary Reports that are included as Appendices to this report. Those reports are presented as follows: Appendix A – Weekly Summary of Site Activities for April 24 – 28, 2006; Appendix B – Weekly Summary of Site Activities for May 1 – 5, 2006; Appendix C – Weekly Summary of Site Activities for May 8 – 12, 2006; and Appendix D – Weekly Summary of Site Activities for May 15 – 19, 2006.

## **1.2 Sampling and Analysis**

BISCo secured Environmental Quality Industrial Services (EQIS) to serve as the primary waste sampling, material analysis/laboratory, and waste disposal subcontractor for this Removal Action project. However, due to issues with analytical turn around time (TAT), the Respondents requested that Severn Trent

Laboratories (STL) be allowed to replace RTI Laboratories of Livonia, Michigan (RTI) as the laboratory of record for the Removal Action. This request was approved by OSC Turner on April 20, 2006.

For the reporting period, a total of 15 soil samples were collected by BISCO and CRA at the RRG/Clayton Site. The collected soil samples included 3 interim sidewall samples (labeled as TP #6 samples) from the GP-2/TP #5/TP #6 excavation, 7 (6 sidewall and 1 duplicate) interim sidewall samples (labeled as TP 50 samples) from the GP-5/TP #50 excavation, and 5 (4 sidewall and 1 duplicate) confirmatory samples from the GC excavation. It should be noted that the 7 samples collected from the GP-5/TP #50 excavation were collected from the previously sampled sidewall locations for the expressed/explicit purpose of vertically delineating PCB impact on area soils. Summary tables showing the analytical results from the soil samples collected at the Site during this reporting period are presented by location as Appendix E (GP-2/TP #6), Appendix F (GP-5/TP #50), and Appendix G (GC), respectively. Copies of the analytical reports for these samples are included as Appendices H, I and J, respectively. It should also be noted that the data for the TP #6 and TP #50 samples were presented in the same analytical report (dated May 17, 2006), which was separated for presentation as Appendix H and Appendix I of this Status Report.

### **1.3 Removal Action Work**

Several actions have been undertaken towards completing the Removal Action at the RRG/Clayton Chemical Site during the reporting period. The more significant completed actions were discussed above in Section 1.1 of this report. Additional details of the activities performed are presented in the Weekly Activity Summaries included as Appendices A through D of this report.

## **2.0 ENCOUNTERED PROBLEMS, RESOLUTIONS, AND ANTICIPATED PROBLEMS**

The excavation of known impacted soils along the eastern edge of the Site has led to the generation of an unexpected waste stream. Analytical results from soil samples collected from the stockpiled materials indicate the chemicals are present in concentrations that exceed the threshold values for RCRA hazardous materials and TSCA materials. There are a limited number of permitted Treatment, Storage and Disposal Facilities (TSDFs) that will handle these mixed waste streams, and as such, attempts by the Respondents to arrange for disposal of these materials have been delayed. Originally, the intended approach thought to be most suitable to address these materials in the most environmentally responsible manner was to treat the material in order to remove and/or reduce the levels of RCRA volatile organic compounds (VOCs) to produce a waste that can be accepted at an approved TSCA facility for disposal as PCB-containing waste. Unfortunately, delays in the completion of the bench scale treatability studies conducted on the materials have produced a subsequent delay in the submission of a Waste Management proposal to U.S. EPA for review. Although this option is still being researched, other alternatives are also being considered by the Respondents. Among these alternatives are disposal via incineration; construction of a TSCA-compliant onsite waste containment unit/landfill, and completing a waste characterization/delineation effort followed by the in place capping of the delineated materials.

Additionally, informational deficiencies in the Site operational history have led to questions being raised for the proper/correct categorization of Site waste. Attempts to produce accurate and appropriate responses to the questions have led to delays in the approval of select waste streams into the target TSDFs.

No additional problems or issues are anticipated for the upcoming period with the possible exception of weather related delays.

### **3.0 ANALYTICAL DATA GENERATED/RECEIVED**

As stated previously, analytical results were received for the confirmatory and interim sidewall samples collected from the active excavation locations at the Site. Analytical results from these samples are provided in tabular summary form as Appendices E (GP-2/TP # 6), F (GP-5/TP #50) and G (GC), respectively.

Copies of the analytical reports for the GP-2/TP # 6 excavation, the GP-5/TP #50 excavation, and the GC excavation are presented as Appendices H, I and J, respectively, of this Status Report.

### **4.0 ANTICIPATED ACTIVITIES FOR UPCOMING REPORT PERIOD**

#### **4.1 Site Plans**

During the upcoming reporting period (May 22, 2006, through June 23, 2006), the following activities are anticipated:

- Tank cleaning and demolition activities will be completed. The contents of tank G8 will be transferred to the appropriate shipping container for final disposal;
- The remaining drummed materials at the Site will be segregated, composited, and processed for offsite disposal in accordance with the analytical results from the collected waste characterization samples;
- Additional excavation will take place at the GP-2, GP-5, TP #50, and GC locations. Interim and final confirmatory sidewall samples will be collected to determine completion of the removal activities. Additional sampling of the resultant soil stockpiles from the excavations will be performed to initially characterize these materials;
- The Respondents will prepare and submit a proposal for the management of the current and future expected mixed waste soil stockpiles at the Site. Upon approval from U.S. EPA/OSC Turner, the approved waste management measure/method will be initiated;
- The shipment of materials offsite for disposal will continue; and
- Miscellaneous Site cleanup and restoration activities will be completed, as needed, based on the progress of the remaining Removal activities.

#### **4.2 Sampling and Analysis**

Soil sampling activities are anticipated to continue during the upcoming reporting period. Waste delineation (confirmatory) samples will be collected in accordance with the Removal Action Work Plan and the QAPP, and then submitted for chemical analysis based on the previously identified elevated chemical concentrations at the specific locations. Based on the results from these samples, an appropriate response (additional excavation or no action) will be determined and completed accordingly.

Waste Characterization sampling may continue to be performed on the recovered materials from the excavation activities.

As with previous sampling activities, EQIS personnel will perform the majority of the sampling activities, and, in accordance with the recent approval by OSC Turner, the subsequent analysis of the confirmatory and waste characterization samples will be performed by STL St. Louis.

#### **4.3 Removal Action Work**

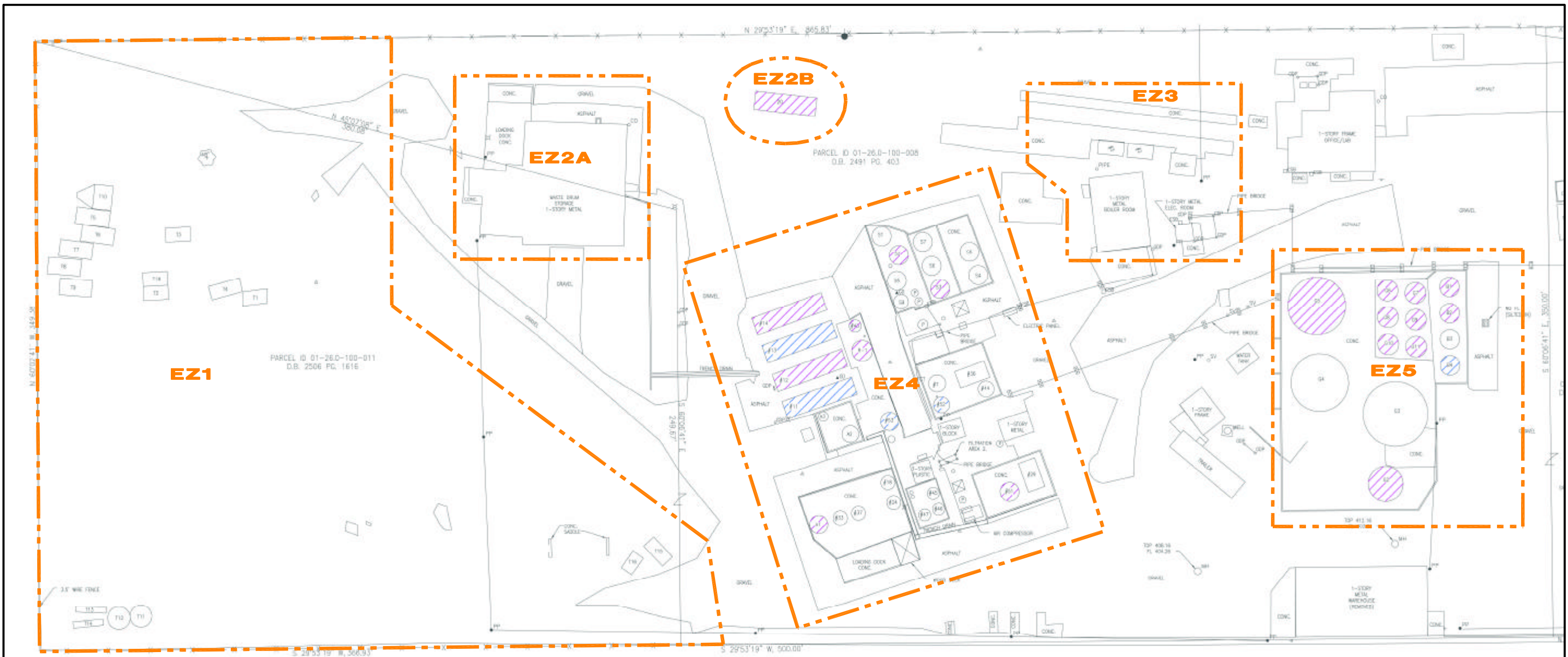
Among the activities expected to be performed and/or completed during the upcoming report period are the assembly of hazardous wastes; soil excavation and investigation activities; waste characterization and disposal activities; and the initiation of Site restoration activities. An anticipated schedule for these activities appears below.

#### **5.0 ANTICIPATED SCHEDULE**

<i>Activity</i>	<i>Duration (business days)</i>	<i>Expected Start Date</i>
Install Stormwater Control Measures	As needed/ongoing	May 22, 2006
Continue Tank Sludge Removal	Ongoing/30 days	May 22, 2006
Continue Characterization of Drum Wastes/Drum Processing	Ongoing/30 days	May 22, 2006
Continue Assembly of Site Wastes For Offsite Shipment	Ongoing/30 days	May 22, 2006
Submit Soil Treatment/Management Proposal For U.S. EPA Review/Approval	30 days	June 9, 2006
Initiate Approved Mixed Waste Management Solution	30 days	June 19, 2006
Submit Status Report #8	1 day	June 30, 2006
Complete Soil Excavation and Delineation Sampling (secondary sub-phase)	To be determined	July 24, 2006
Initiate Site Restoration Measures	As needed/ongoing	August 21, 2006

FIGURE 1

SITE MAP



**LEGEND**

CABLE SERVICE BOX	POWER POLE
CLEANOUT	GUY WIRE
ELECTRIC SERVICE BOX	PIPE BRIDGE FOUNDATION
FAUCET	SEWER VENT
FIRE HYDRANT	WATER MANHOLE
GAS DRIP	SMALL VAT POTS IN PROCESS AREA (<5'x5')
GAS VALVE	TANKS WITH "WEEPING"
GUIDEPOST	TANKS WITH SOLIDS REMAINING
LIGHT STANDARD	
MAILBOX	
SIGN	
MANHOLE	
OLD IRON PIPE	

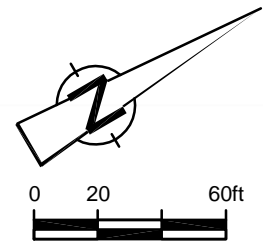


figure 1  
 SITE WORKZONE LAYOUT MAP  
 RRG CLAYTON CHEMICAL  
 Sauget, Illinois



## APPENDIX A

WEEKLY SUMMARY OF SITE ACTIVITIES FOR APRIL 24 - 28, 2006





**CONESTOGA-ROVERS  
& ASSOCIATES**

8615 W. Bryn Mawr Avenue, Chicago, Illinois 60631  
Telephone: (773) 380-9933 Fax: (773) 380-6421  
www.CRAworld.com

## MEMORANDUM

TO: RRG/Clayton Site Technical Committee REF. NO.: 042192-03

FROM: Garth Daley/ko/19 DATE: May 31, 2006

C.C.: Sharon Newlon  
J. Weinberger  
P. Harvey  
R. Shepherd  
B. Schloessler

RE: **Weekly Summary Of Site Activities For April 24 - 28, 2006**

Site activities began at the Resource Recovery Group/Clayton Chemical Company (RRG/Clayton) Site on Monday, December 5, 2005. These activities are in response to the Solids Removal Action as mandated by the Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action for the RRG/Clayton Chemical Soils Site, dated October 28, 2005. A summary of the activities completed during the twenty-first week (the period April 24 through April 28, 2006) is presented below.

Date	Tasks	Activity
April 24, 2006	Mobilization Activities	Conestoga-Rovers & Associates (CRA), Brandenburg Industrial Service Company (BISCo) and Environmental Quality Industrial Services (EQIS) personnel remobilized to the Site
	Project Coordination	START Tom Binz was onsite to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped offsite on 02/08/06
	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	No activity. To date roughly 3,250' of piping have been removed and shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	BISCo shipped materials from Stockpile #1, the stockpile of excavated U.S. EPA test pit # 44 materials, offsite for disposal at the Milam Landfill in East St. Louis, IL (Milam Landfill). Roughly 784 tons of materials were shipped to the landfill in 30 loads

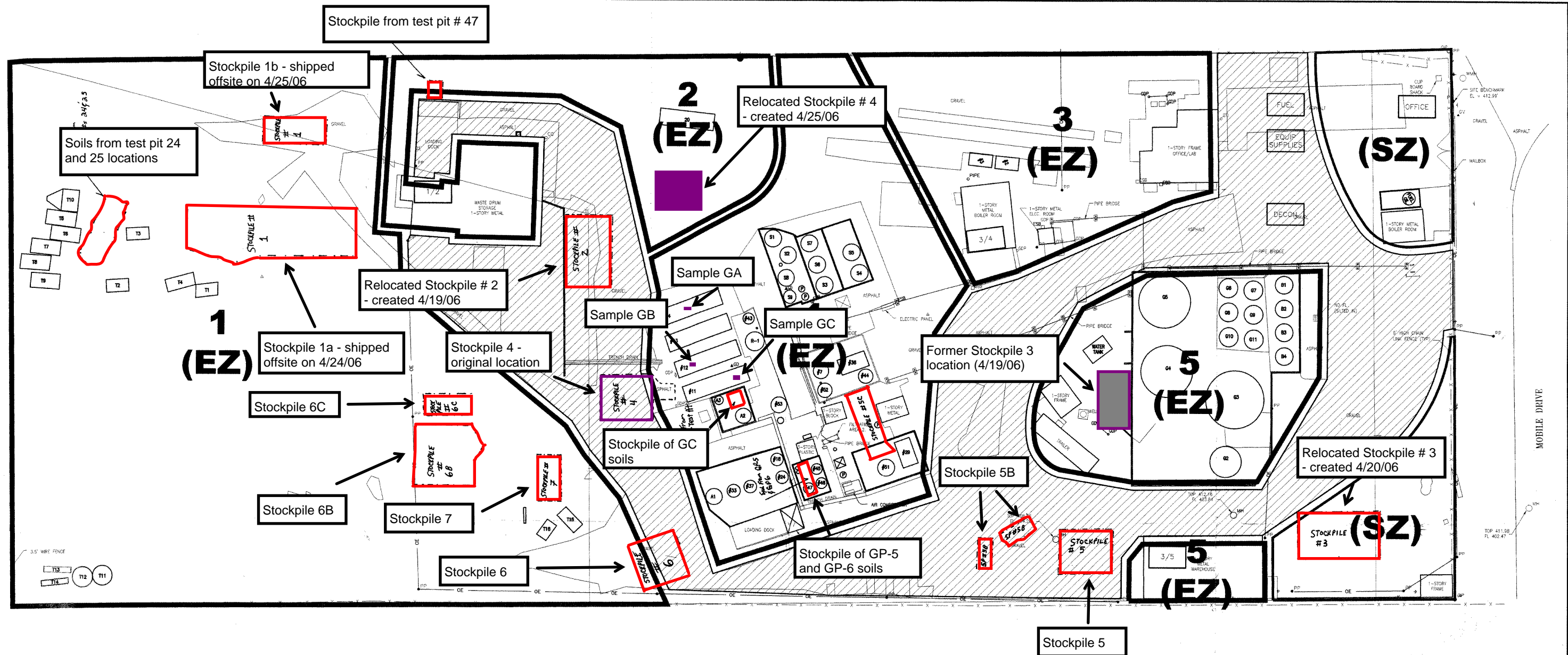
Date	Tasks	Activity
April 24, 2006	Miscellaneous	No activity
April 25, 2006	Mobilization Activities	No activity
	Project Coordination	START Doug Ball was onsite to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped offsite on 02/08/06
	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	No activity. To date roughly 3,250' of piping have been removed and shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	BISCo completed the offsite disposal of the stockpiled materials from Stockpile #1 (from U.S. EPA test pit # 44 and 45). Roughly 82 tons of materials were shipped to Milam Landfill in 3 loads. BISCo also relocated Stockpile # 4 to an area near the former location of tank 20
	Miscellaneous	No activity
April 26, 2006	Mobilization Activities	No activity
	Project Coordination	START Doug Ball was onsite to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped offsite on 02/08/06
	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	No activity. To date roughly 3,250 feet of piping have been removed and shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	BISCo combined stockpiles 6, 6a and 6b to form a single stockpile
	Miscellaneous	No activity

Date	Tasks	Activity
April 27, 2006	Mobilization Activities	EQIS personnel Steve Kieffer demobilized from the Site. EQIS Kieffer will be on vacation during the week of May 1 <sup>st</sup> , and due to uncertainty of activities for the week of May 1 <sup>st</sup> , no replacement EQIS personnel will be scheduled
	Project Coordination	START Doug Ball was onsite to observe Site activities. OSC Kevin Turner contacted Fernando Carou of the Respondents and requested an update of the treatability studies for the mixed stockpile waste and of Site conditions in general
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped offsite on 02/08/06
	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	BISCo uncovered and accessed the underground piping discovered during the sampling activities in the tank farm for tank 11 through 14. The lines were found to proceed to the north before splitting to the west (towards the former location of tank # 3/the Boiler Building) and the east-northeast. The lines were found to contain roughly 45 gallons of a black, oily liquid. A section of piping (125 feet in length) was removed to facilitate removing the oily liquid from the southern portion of this pipe. To date roughly 3,375 feet of piping have been removed from service. Roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	No activity
	Miscellaneous	No activity
April 28, 2006	Mobilization Activities	BISCo performed general Site and work area clean-up activities. CRA and BISCo suspended Site activities for the weekend
	Project Coordination	START Doug Ball was onsite to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped offsite on 02/08/06
	AST Sampling/Cleaning Removal	No activity

Date	Tasks	Activity
April 28, 2006	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	BISCo continued to unearth underground piping leading from the EZ 4 Work Zone. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	BISCo excavated impacted soils from the GC sample location at the northeast portion of the tank farm for tanks 11 through 14 based on analytical results from the previously collected overburden sample. An excavation of roughly 25' wide by 25' long by 3' deep was created (roughly 70 in-place cubic yards of soils were excavated). 4 confirmatory sidewall samples and 1 duplicate were collected
	Miscellaneous	No activity

If you have any questions about the information provided in this memorandum, please contact me (773-380-9933 or 708-203-8672), John Weinberger (773-419-4585), or Phil Harvey (773-380-9933) for clarification.

Attachment



[Hatched Box] CONTAMINATION REDUCTION ZONE  
 (EZ) EXCLUSION ZONE  
 (SZ) SUPPORT ZONE

[Dashed Box] STOCKPILE LOCATION AS OF 4/21/06

C/SB CABLE SERVICE BOX  
 C/O CLEANOUT  
 E/SB ELECTRIC SERVICE BOX  
 F/F FALLET  
 F/H FIRE HYDRANT  
 G/S GAS DRIP  
 G/V GAS VALVE  
 G/P GUIDEPOST  
 L/S LIGHT STANDARD  
 M/B MAILBOX  
 S/S SIGN  
 W/H WATER MANHOLE  
 O/I OLD IRON PIPE  
 G/W GUY WIRE  
 P/B PIPE BRIDGE FOUNDATION  
 W/H WATER MANHOLE  
 S/W SMALL WAT POTS  
 W/P WAT PROCESS AREA  
 (<5'x5')

**Brandenburg**  
 Industrial Service Company

This document was prepared by Brandenburg for its own internal use. This document is Brandenburg's property. No portion of this document may be copied, otherwise reproduced, or distributed without Brandenburg's express permission.  
**WARNING:** The information contained in this document may be incomplete and/or inaccurate and should be independently verified prior to use.

DATE	ISSUED TO	REFERENCE DRAWING	REV.	DATE	DESCRIPTION

SCALE: 1"=30'-0"	0	15'	30'	45'	60'	75'	90'
DATE:	30-Nov-2005	DRAWN BY:					
PLOT FILE:	CLAYTON.PLT	CHECKED BY:					

TITLE: Clayton Chemical Site  
 Sauget, Illinois  
 Overall Site Plan

DRAWING:  
 1 of 1

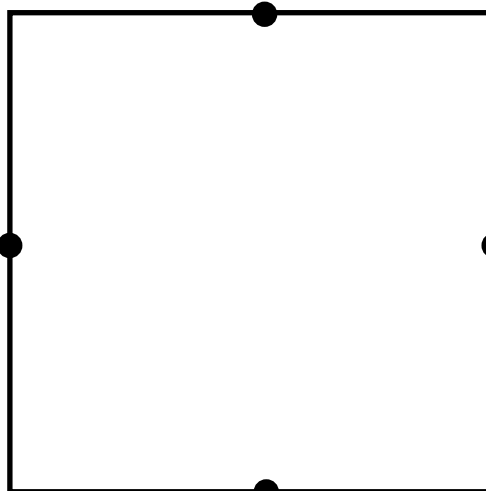
Scale - 1' = 10'



Toluene - 52,000 ppb ( SRO is 42,000 ppb) □  
Chlorobenzene - 1,800 ppb (1,300 ppb) □  
1,2,4-Trimethylbenzene - 4,300 ppb (730 ppb) □  
□  
PID Reading - 315 ppm

1,2,4-Trimethylbenzene - 1,400 ppb (SRO is 730 ppb) □  
□  
PID Reading - 315 ppm

59866/59867 □  
Duplicate of 59866) □



Concrete Pad

59868

59870

1,2,4-Trimethylbenzene - 780 ppb (SRO is 730 ppb) □  
□  
PID Reading - 95 ppm

No exceedences □  
□  
PID Reading - 175 ppm

59869

No exceedences □  
□  
PID Reading - 68 ppm

## APPENDIX B

### WEEKLY SUMMARY OF SITE ACTIVITIES FOR May 1 - 5, 2006



**CONESTOGA-ROVERS  
& ASSOCIATES**

8615 W. Bryn Mawr Avenue, Chicago, Illinois 60631  
Telephone: (773) 380-9933 Fax: (773) 380-6421  
www.CRAworld.com

## MEMORANDUM

TO: RRG/Clayton Site Technical Committee REF. NO.: 042192-03

FROM: Garth Daley/lg/20 DATE: May 31, 2006

C.C.: Sharon Newlon  
J. Weinberger  
P. Harvey  
R. Shepherd  
B. Schloessler

RE: **Weekly Summary Of Site Activities For May 1 - 5, 2006**

Site activities began at the Resource Recovery Group/Clayton Chemical Company (RRG/Clayton) Site on Monday, December 5, 2005. These activities are in response to the Solids Removal Action as mandated by the Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action for the RRG/Clayton Chemical Soils Site, dated October 28, 2005. A summary of the activities completed during the twenty-second week (the period May 1 through May 5, 2006) is presented below.

Date	Tasks	Activity
May 1, 2006	Mobilization Activities	Conestoga-Rovers & Associates (CRA), and Brandenburg Industrial Service Company (BISCo) personnel remobilized to the Site
	Project Coordination	START Doug Ball was on site to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped off site on 02/08/06
	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	BISCo continues to unearth underground piping. . To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006



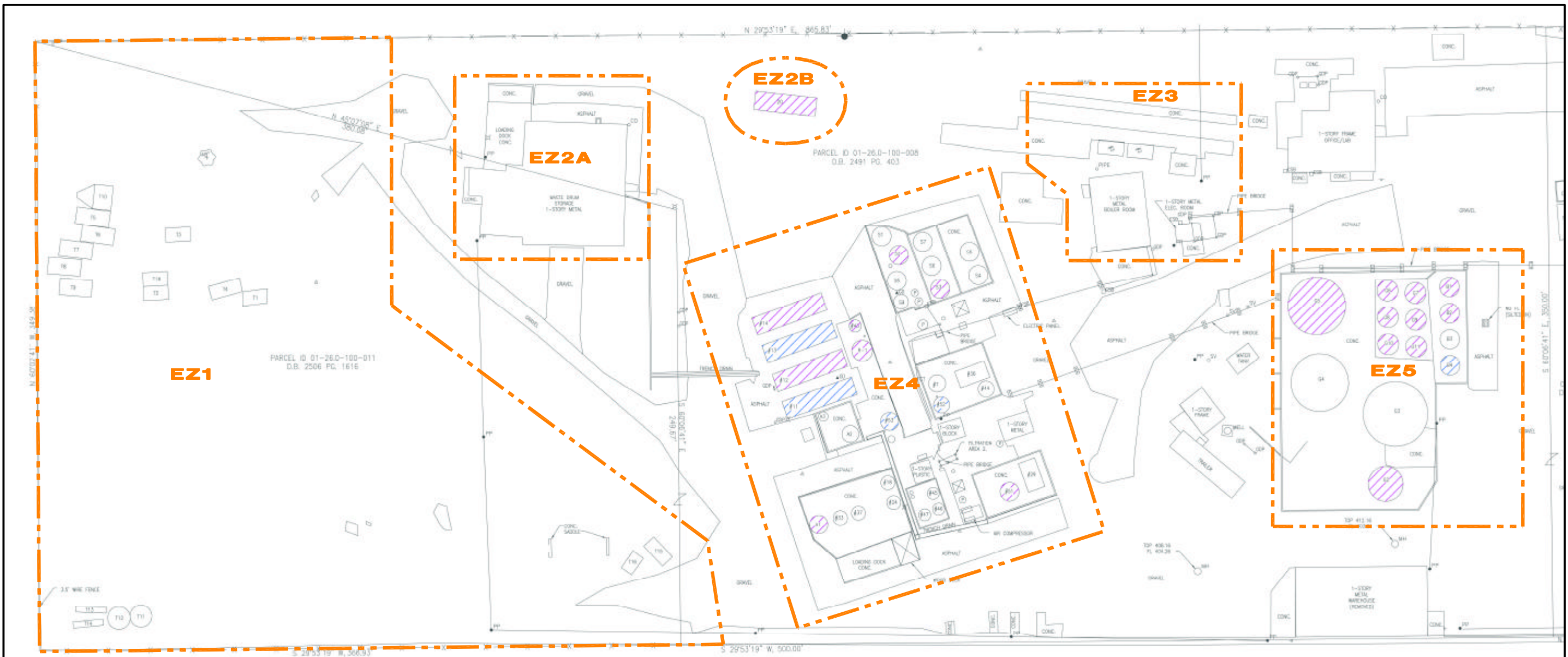
Date	Tasks	Activity
May 1, 2006	Soil Sampling/Excavation	No on site activity. BISCO and CRA continue to research possible treatment and/or disposal options for the mixed waste (RCRA and TSCA) soils recovered from the excavations at the eastern portion of the Site
	Miscellaneous	No activity
May 2, 2006	Mobilization Activities	BISCO personnel performed general Site and work area clean-up activities prior to demobilizing from the Site due to the temporary suspension of Site activities
	Project Coordination	START Doug Ball was on site to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped off site on 02/08/06
	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	Cleaned out drum draining structure and drummed residual sludge
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	BISCO secured the coverings on all soil stockpiles in preparation for demobilization. BISCO and CRA continue to research possible treatment and/or disposal options for the mixed waste soils recovered from the excavations at the eastern portion of the Site
	Miscellaneous	No activity
May 3, 2006	Mobilization Activities	No activity
	Project Coordination	No START on site presence or oversight due to the temporary suspension of Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped off site on 02/08/06
	AST Sampling/Cleaning Removal	No activity

Date	Tasks	Activity
May 3, 2006	Drum Characterization/Disposal	CRA personnel prepared the drum shipment paperwork (labels) to facilitate material transport during the week of May 8, 2006
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	No on site activity. BISCO and CRA continue to research possible treatment and/or disposal options for the mixed waste soils recovered from the excavations at the eastern portion of the Site
	Miscellaneous	No activity
May 4, 2006	Mobilization Activities	CRA personnel demobilized from Site
	Project Coordination	No START on site presence or oversight due to the temporary suspension of Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped off site on 02/08/06
	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	CRA continues preparation of drum shipment paperwork in anticipation of waste shipment during the week of May 8, 2006
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	No on site activity. BISCO and CRA continue to research possible treatment and/or disposal options for the mixed waste soils recovered from the excavations at the eastern portion of the Site
	Miscellaneous	No activity
May 5, 2006	Mobilization Activities	No activity
	Project Coordination	No START on site presence or oversight due to the temporary suspension of Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped off site on 02/08/06

<b>Date</b>	<b>Tasks</b>	<b>Activity</b>
May 5, 2006	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	No on site activity. BISCO and CRA continue to research possible treatment and/or disposal options for the mixed waste soils recovered from the excavations at the eastern portion of the Site
	Miscellaneous	No activity

If you have any questions about the information provided in this memorandum, please contact me (773-380-9933 or 708-203-8672), John Weinberger (773-419-4585), or Phil Harvey (773-380-9933) for clarification.

Attachment



**LEGEND**

CSB	CABLE SERVICE BOX	PP	POWER POLE
CO	CLEANOUT	GW	GUY WIRE
ESB	ELECTRIC SERVICE BOX	PBF	PIPE BRIDGE FOUNDATION
FC	FAUCET	SV	SEWER VENT
FH	FIRE HYDRANT	WM	WATER MANHOLE
GD	GAS DRIP	SV	SMALL VAT POTS IN PROCESS AREA (<5'X5')
GV	GAS VALVE	TW	TANKS WITH "WEeping"
GP	GUIDEPOST	TS	TANKS WITH SOLIDS REMAINING
LS	LIGHT STANDARD		
MB	MAILBOX		
SN	SIGN		
MH	MANHOLE		
OP	OLD IRON PIPE		

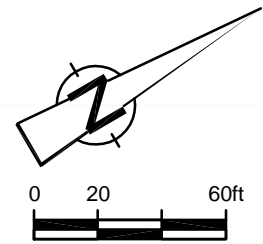


figure 1  
 SITE WORKZONE LAYOUT MAP  
 RRG CLAYTON CHEMICAL  
 Sauget, Illinois



## APPENDIX C

### WEEKLY SUMMARY OF SITE ACTIVITIES FOR MAY 8 - 12, 2006



**CONESTOGA-ROVERS  
& ASSOCIATES**

8615 W. Bryn Mawr Avenue, Chicago, Illinois 60631  
Telephone: (773) 380-9933 Fax: (773) 380-6421  
www.CRAworld.com

## MEMORANDUM

TO: RRG/Clayton Site Technical Committee REF. NO.: 042192-03

FROM: Garth Daley/lg/21 DATE: May 31, 2006

C.C.: Sharon Newlon  
J. Weinberger  
P. Harvey  
R. Shepherd  
B. Schloessler

RE: **Weekly Summary Of Site Activities For May 8 - 12, 2006**

Site activities began at the Resource Recovery Group/Clayton Chemical Company (RRG/Clayton) Site on Monday, December 5, 2005. These activities are in response to the Solids Removal Action as mandated by the Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action for the RRG/Clayton Chemical Soils Site, dated October 28, 2005. A summary of the activities completed during the twenty-third week (the period May 8 through May 12, 2006) is presented below.

Date	Tasks	Activity
May 8, 2006	Mobilization Activities	No activity
	Project Coordination	No START on site presence or oversight due to the temporary suspension of Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped off site on 02/08/06
	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	BISCo and CRA continue to research disposal and treatment options for the mixed waste soil stockpiles
	Miscellaneous	No activity

Date	Tasks	Activity
May 9, 2006	Mobilization Activities	Conestoga-Rovers & Associates (CRA), and Brandenburg Industrial Service Company (BISCo) personnel (partial crew) remobilized to the Site. BISCo mobilized a Caterpillar forklift to facilitate drum shipment activities
	Project Coordination	START Doug Ball was on site to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped off site on 02/08/06
	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	BISCo and CRA collected five 4-liter treatability samples and a 4 ounce sample jar were collected and submitted to EQ's laboratory (CT) for the evaluation of on site treatment options for the mixed (RCRA and TSCA) waste soils being recovered from the excavations along the eastern portion of the Site
	Miscellaneous	No activity
May 10, 2006	Mobilization Activities	Remainder of BISCo crew, including one new crew member, mobilizes to the Site. Crew size remains at 4 since new crew member is a replacement
	Project Coordination	START Doug Ball was on site to observe Site activities. Notification of waste shipment was submitted to U.S. EPA, MDEQ and IEPA in the form of a Transportation and Disposal (T&D) Plan, which was submitted electronically. IEPA Mike Grant was on Site briefly for an update on Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped off site on 02/08/06

Date	Tasks	Activity
May 10, 2006	AST Sampling/Cleaning Removal	BISCo loads and ships 81 drums (4 Waste Approval groups - roughly 22 cubic yards) of hazardous and non-hazardous wastes recovered from tank cleaning activities off site
	Drum Characterization/Disposal	BISCo loads and ships a total of 82 drums (5 Waste Approval groups) of hazardous and non-hazardous wastes off site
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	BISCo loads and ships 1 drum of hazardous material recovered during equipment demolition. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	BISCo and CRA continue to research disposal and treatment options for the mixed waste soil stockpiles
	Miscellaneous	No activity
May 11, 2006	Mobilization Activities	No activity
	Project Coordination	START Doug Ball was on site to observe Site activities. The Respondents resolve shipment certification issue raised by MDEQ
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped off site on 02/08/06
	AST Sampling/Cleaning Removal	BISCo loads 2 30-cubic yard roll off boxes with the material from tank 13 in preparation for shipment on Friday, May 12, 2006.
	Drum Characterization/Disposal	CRA continues preparation of drum shipment paperwork in anticipation of waste shipment during the week of May 15, 2006
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	BISCo and CRA continue to research disposal and treatment options for the mixed waste soil stockpiles
	Miscellaneous	No activity
May 12, 2006	Mobilization Activities	BISCo and CRA suspended Site activities for the week



Date	Tasks	Activity
May 12, 2006	Project Coordination	START Doug Ball was on site to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped off site on 02/08/06
	AST Sampling/Cleaning Removal	BISCo shipped five (5) loads (44 cubic yards) of tank 13 material to the Veolia (formerly Onyx) Trade Waste Incinerator facility. For the week, a total of 66 cubic yards of recovered tank contents were shipped off site for disposal
	Drum Characterization/Disposal	No activity. For the week, a total of 82 drums of recovered waste materials were shipped off site for disposal
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	BISCo and CRA collected 10 sidewall samples from 9 locations in the GP-2 and GP-5/TP-50 excavations for vertical assessment of PCBs. BISCo and CRA continue to research disposal and treatment options for the mixed waste soil stockpiles
	Miscellaneous	No activity

If you have any questions about the information provided in this memorandum, please contact me (773-380-9933 or 708-203-8672), John Weinberger (773-419-4585), or Phil Harvey (773-380-9933) for clarification.

Attachment

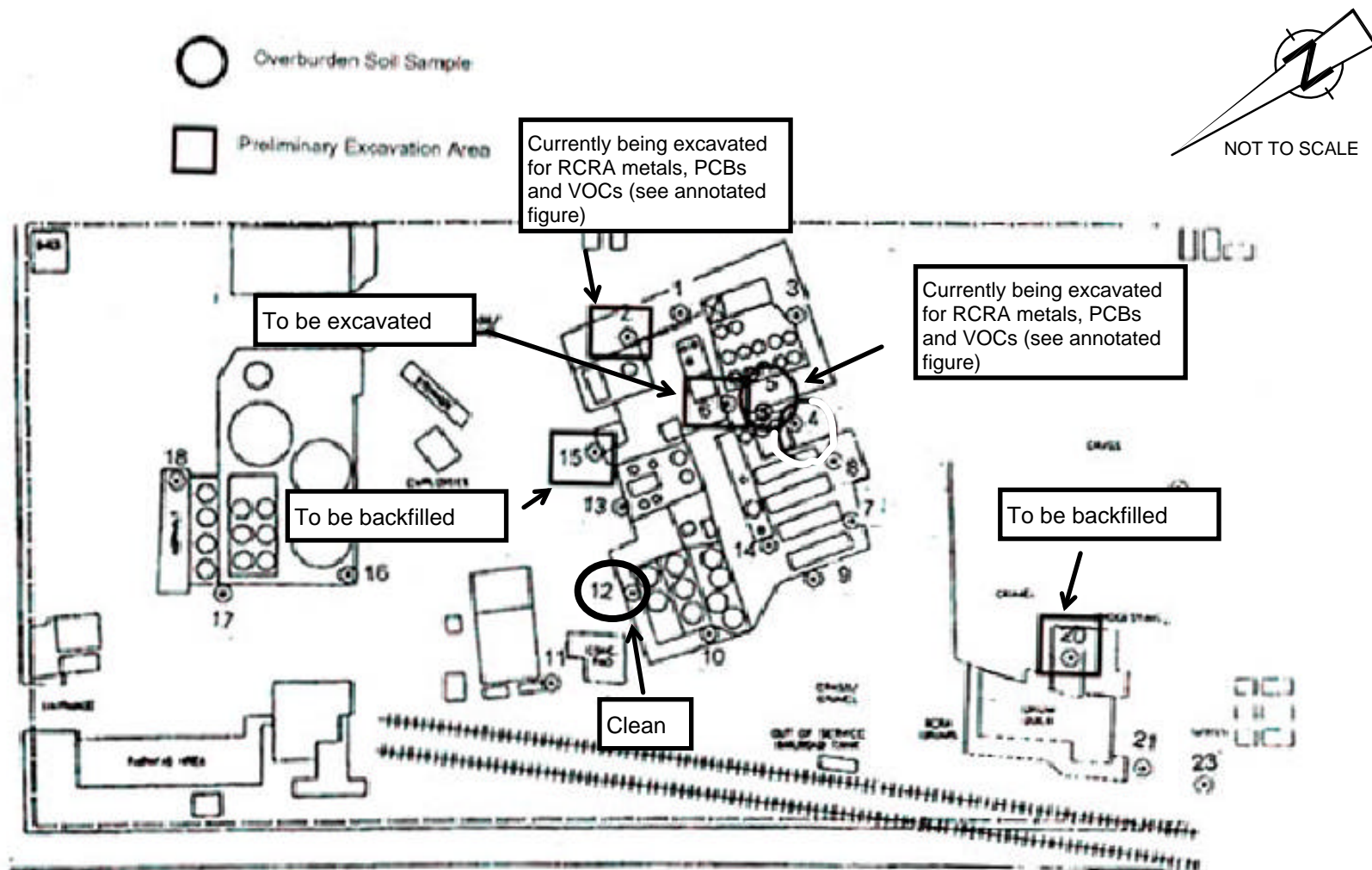


figure 4.3  
 PROPOSED EXCAVATION AREAS AND OVERBURDEN  
 SAMPLE LOCATIONS-GEOPROBE BORINGS  
 RRG CLAYTON CHEMICAL  
*Sauget, Illinois*







Toluene - 3,600 ppb (SRO is 61,000 ppb)  
Tetrachloroethene - 200,000 ppb (28,000 ppb)  
Ethylbenzene - 200,000 ppb (58,000 ppb)  
m,p-Xylene - 840,000 ppb (420,000 ppb)  
1,3,5-Trimethylbenzene - 21,000 ppb (460 ppb)  
1,2,4-Trimethylbenzene - 47,000 ppb (730 ppb)  
PID Reading - 190 ppm

No exceedences  
PID Reading - 17 ppm

PCB 1260 - 2,800 ppb (SRO is 1,000 ppb)  
Toluene - 130,000 ppb ( 61,000 ppb)  
Tetrachloroethene - 470,000 ppb (28,000 ppb)  
Chlorobenzene - 6,400 ppb (1,300 ppb)  
1,3,5-Trimethylbenzene - 9,100 ppb (460 ppb)  
1,2,4-Trimethylbenzene - 21,000 ppb (730 ppb)  
PID Reading - 91.3 ppm

No exceedences  
PID Reading - 389 ppm

PCB 1260 - 14,000 ppb (SRO is 1,000 ppb)  
Toluene - 510,000 ppb ( SRO is 61,000 ppb)  
Ethylbenzene - 65,000 pb (SRO is 56,000 ppb)  
1,3,5-Trimethylbenzene - 33,00 ppb (460 ppb)  
1,2,4-Trimethylbenzene - 26,000 ppb (730 ppb)  
PID Reading - 670 ppm

PCB 1260 - 31,000 ppb (SRO is 1,000 ppb)  
Toluene - 110,000 ppb (SRO is 61,000 ppb)  
1,3,5-Trimethylbenzene - 4,100 ppb (460 ppb)  
1,2,4-Trimethylbenzene - 2,500 ppb (730 ppb)  
PID Reading - 1,100 ppm

PCB 1260 - 3,800 ppb (SRO is 1,000 ppb)  
PID Reading - 360 ppm

PCB 1016 - 4,800 ppb (SRO is 1,000 ppb)  
PCB 1260 - 5,100 ppb (SRO is 1,000 ppb)  
PID Reading - 360 ppm

59845 A ~~0-1.5~~ (0.202) ppm  
59845 B (1.5-3.0) 16.0 ppm

Lead - 1,020,000 ppb (SRO is 400,000 ppb)  
PCB 1260 - 47,000 ppb (SRO is 1,000 ppb)  
1,4-Dichlorobenzene - 1,800,000 ppb (SRO is 340,000 ppb)  
1,3,5-Trimethylbenzene - 9,500 ppb (460 ppb)  
1,2,4-Trimethylbenzene - 7,400 ppb (730 ppb)  
PID Reading - 50 ppm

	59844A	0-1.5	ND
DUP	59844B	1.5-3.0	37.7 ppm
	59844C	1.5-3.0	48.0 ppm

GP5  
EXCAVATION

5'6"  
Deep

六

5983

Deep /

195  
EX

A) 4-T)

2'

1

59844

- 11,000 ppb (460 ppb)
- 25,000 ppb (730 ppb)

⊕ 59832 / 59833 (DUP I)

PCB 1260 - 3,300 ppb (SRO is 1,000 ppb)  
Ethylbenzene - 110,000 ppb ((58,000 ppb)  
1,3,5-Trimethylbenzene - 5,500 ppb (460 ppb)  
1,2,4-Trimethylbenzene - 12,000 ppb (730 ppb)  
PID Reading - 4,331 ppm

PCB 1260 - 6,400 ppb (SRO is 1,000 ppb)  
Toluene - 500,000 ppb ( SRO is 61,000 ppb)  
Tetrachloroethene - 30,000 ppb (28,000 ppb)  
Chlorobenzene - 19,000 ppb (1,300 ppb)  
1,3,5-Trimethylbenzene - 5,100 ppb (460 ppb)  
1,2,4-Trimethylbenzene - 17,000 ppb (730 ppb)  
PID Reading - 1,789 ppm

PCB 1260 - 5,200 ppb (SRO is 1,000 ppb)  
Toluene - 160,000 ppb ( SRO is 61,000 ppb)  
Tetrachloroethene - 110,000 ppb (28,000 ppb)  
Chlorobenzene - 19,000 ppb (1,300 ppb)  
1,3,5-Trimethylbenzene - 5,100 ppb (400 ppb)  
1,2,4-Trimethylbenzene - 17,000 ppb (730 ppb)  
PID Reading - 487 ppm

$\oplus$  59842

No exceedences  
PID Reading - 500 ppm

④ 59843

Lead - 615,000 ppb (SRO is 400,000 ppb)  
PCB 1260 - 3,600 ppb (SRO is 1,000 ppb)  
Toluene - 1,300,000 ppb (SRO is 61,000 ppb)  
1,3,5-Trimethylbenzene - 12,000 ppb (460 ppb)  
1,2,4-Trimethylbenzene - 40,000 ppb (730 ppb)  
PID Reading - 1,200 ppm

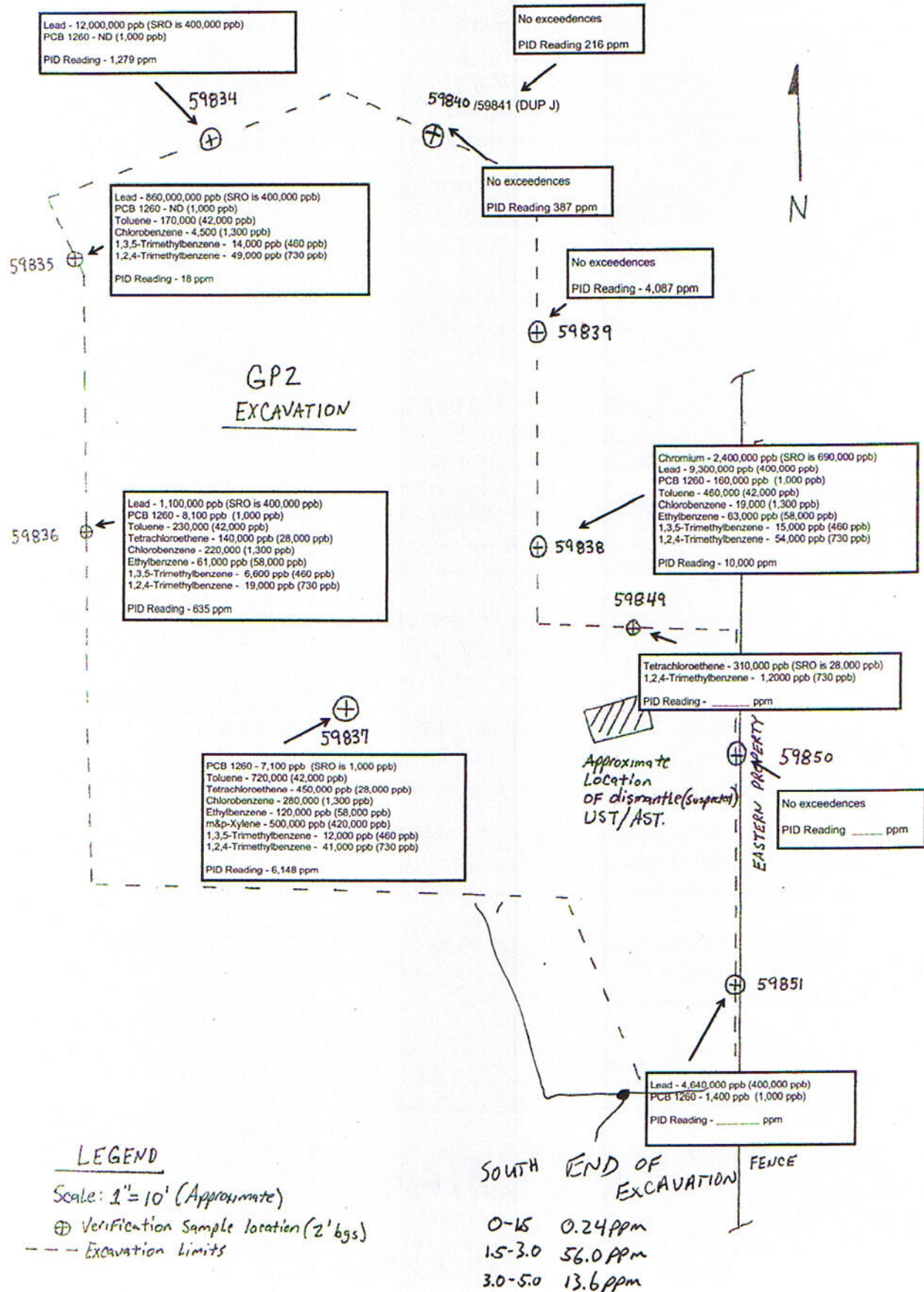
59843A (0-1.5) 1.68 ppm (OK)  
59843B (1.5-3.0) 63 ppm

## LEGEND

⊕ VERIFICATION SAMPLES - 2'  
below ground surface

--- Extent of Excavation  
SCALE: 1" = 10' (Approximate)

The data presented below shows analytes that exceeded the relevant TACO SRO (Construction Worker)



## APPENDIX D

### WEEKLY SUMMARY OF SITE ACTIVITIES FOR MAY 15 – 19, 2006



**CONESTOGA-ROVERS  
& ASSOCIATES**

8615 W. Bryn Mawr Avenue, Chicago, Illinois 60631  
Telephone: (773) 380-9933 Fax: (773) 380-6421  
www.CRAworld.com

## MEMORANDUM

TO: RRG/Clayton Site Technical Committee REF. NO.: 042192-03

FROM: Garth Daley/ko/23 DATE: May 31, 2006

C.C.: Sharon Newlon  
J. Weinberger  
P. Harvey  
R. Shepherd  
B. Schloessler

RE: **Weekly Summary Of Site Activities For May 15 - 19, 2006**

Site activities began at the Resource Recovery Group/Clayton Chemical Company (RRG/Clayton) Site on Monday, December 5, 2005. These activities are in response to the Solids Removal Action as mandated by the Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action for the RRG/Clayton Chemical Soils Site, dated October 28, 2005. A summary of the activities completed during the twenty-fourth week (the period May 15 through May 19, 2006) is presented below.

Date	Tasks	Activity
May 15, 2006	Mobilization Activities	Conestoga-Rovers & Associates (CRA), and Brandenburg Industrial Service Company (BISCo) personnel remobilized to the Site
	Project Coordination	START Doug Ball was onsite to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped offsite on 02/08/06
	AST Sampling/Cleaning Removal	BISCo loaded and shipped the final 2 loads (16 cubic yards [yd <sup>3</sup> ]) of tank 13 materials. Load up process slowed by the cleaning of the tank walls and the extra effort to access tank contents due to interior tank piping
	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006



Date	Tasks	Activity
May 15, 2006	Soil Sampling/Excavation	No onsite activity. BISCO and CRA continue to research disposal and treatment options for the mixed waste (RCRA and TSCA) soil stockpiles generated by the excavation activities from the eastern portion of the Site
	Miscellaneous	No activity
May 16, 2006	Mobilization Activities	No activity
	Project Coordination	START Doug Ball was onsite to observe Site activities. IEPA Mike Grant was onsite for a brief reconnaissance/project update
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped offsite on 02/08/06
	AST Sampling/Cleaning Removal	No activity
	Drum Characterization/Disposal	No activity
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	No onsite activity. CRA and BISCO continue to research possible treatment and/or disposal options for the mixed waste soils that have been excavated from the eastern portion of the Site
	Miscellaneous	No activity
May 17, 2006	Mobilization Activities	Veolia delivered a 30 yd <sup>3</sup> roll off box and 2 1 yd <sup>3</sup> containers to the Site to facilitate waste shipment
	Project Coordination	No onsite START presence to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped offsite on 02/08/06
	AST Sampling/Cleaning Removal	BISCO loaded the contents of tank B2 (roughly 9 yd <sup>3</sup> ) into a 30 yd <sup>3</sup> roll-off box for transport to the neighboring Trade Waste Incinerator (TWI) Site. Following material load out, BISCO cleaned the tank in preparation for offsite disposal. CRA met with Veolia to discuss the PCB certification issue for tank G8, and subsequent waste shipment

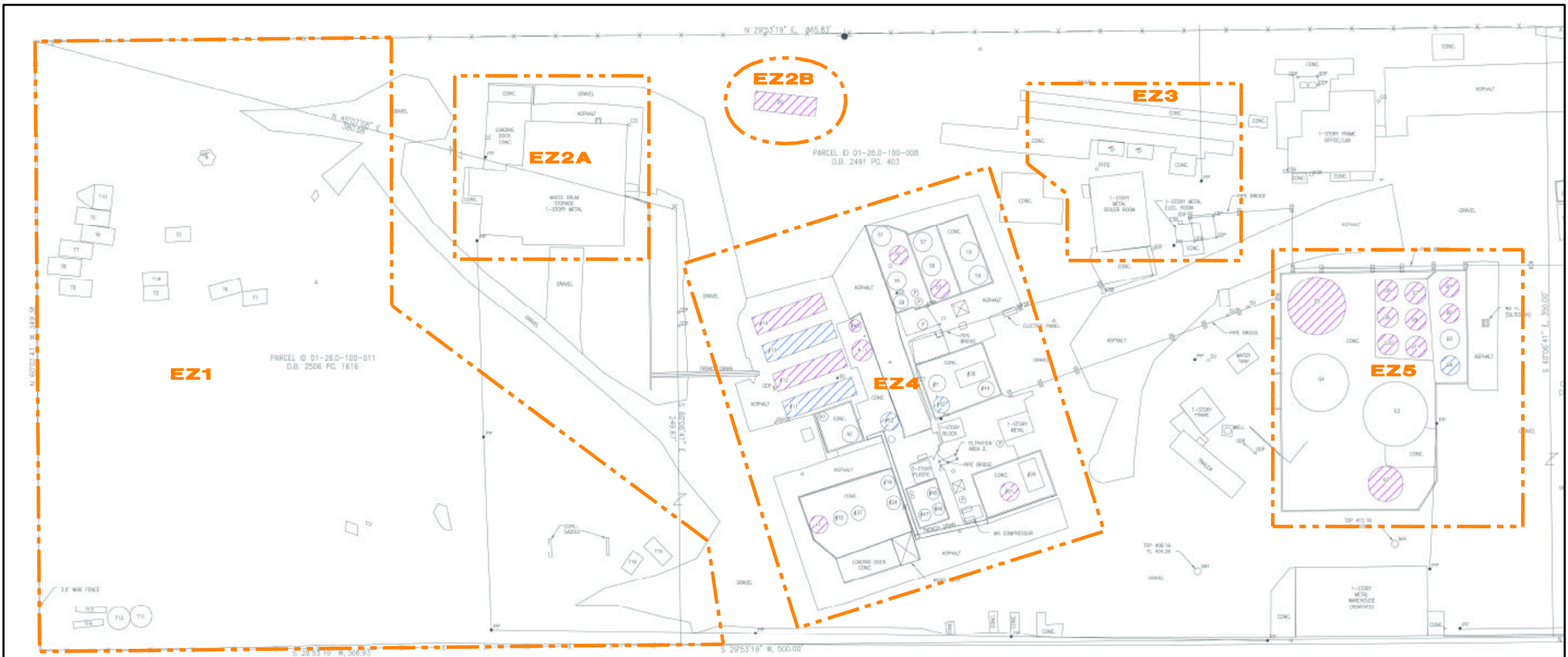


Date	Tasks	Activity
May 17, 2006	Drum Characterization/Disposal	CRA met with Veolia to discuss the disposal of the 57 drums identified for shipment to the TWI facility
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	No onsite activity. CRA and BISCo continue to research possible treatment and/or disposal options for the mixed waste soils that have been excavated from the eastern portion of the Site
	Miscellaneous	CRA met with Veolia to discuss the disposal of the waste characterization samples from the former Site operations that are stored in the Drum Waste Storage Building. Veolia agreed to provide 2 1-yd <sup>3</sup> containers for the packaging of these materials and will provide additional containers as needed
May 18, 2006	Mobilization Activities	No activity
	Project Coordination	START Doug Ball was onsite to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped offsite on 02/08/06
	AST Sampling/Cleaning Removal	BISCo cuts up tank B2 in preparation for offsite shipment
	Drum Characterization/Disposal	BISCo collected a composite waste characterization sample from the 57 drums scheduled for disposal at the TWI facility. The sample was delivered to TWI for analysis
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	No on site activity. BISCo and CRA continue to research disposal and treatment options for the mixed waste soil stockpiles
	Miscellaneous	BISCo began loading the waste characterization samples from the former Site operations into the 1-yd <sup>3</sup> totes provided by Veolia
May 19, 2006	Mobilization Activities	BISCo and CRA suspended Site activities for the week

Date	Tasks	Activity
May 19, 2006	Project Coordination	START Doug Ball was onsite to observe Site activities
	Site Preparation	No activity
	Asbestos Abatement	No activity. Abatement activities were completed on 12/13/05 and the removed ACM was shipped offsite on 02/08/06
	AST Sampling/Cleaning Removal	CRA continues the waste profiling process for shipping the contents of tank G8 to TWI
	Drum Characterization/Disposal	BISCo started loading the 57 drums of hazardous waste scheduled for disposal at the TWI site into a trailer provided by TWI for future transport. Because the final profiling/approval of the material was not completed, the drums were only partially loaded to allow for the future application of the applicable stickers/labels
	Piping Draining/Disconnection	No activity. To date roughly 3,375 feet of piping have been removed and roughly 3,250 feet of piping have been shipped offsite
	Process Equipment Decommissioning	No activity. The removal of process equipment from the Site was completed on March 14, 2006
	Soil Sampling/Excavation	No onsite activity. BISCo and CRA continue to research disposal and treatment options for the mixed waste soil stockpiles
	Miscellaneous	BISCo completed loading the waste characterization samples from the former Site operations into the 1-yd <sup>3</sup> totes provided by Veolia. A total of 6 totes were used for the repackaging of the samples

If you have any questions about the information provided in this memorandum, please contact me (773-380-9933 or 708-203-8672), John Weinberger (773-419-4585), or Phil Harvey (773-380-9933) for clarification.

Attachment



**LEGEND**

	CABLE SERVICE BOX		POWER POLE
	CLEANOUT		GUY WIRE
	ELECTRIC SERVICE BOX		PIPE BRIDGE FOUNDATION
	FAUCET		SEWER VENT
	FIRE HYDRANT		WATER MANHOLE
	GAS DRIP		SMALL VAT POTS IN PROCESS AREA (<5'X5')
	GAS VALVE		TANKS WITH "weeping"
	GUIDEPOST		TANKS WITH SOLIDS REMAINING
	LIGHT STANDARD		
	MAILBOX		
	SIGN		
	MANHOLE		
	OLD IRON PIPE		

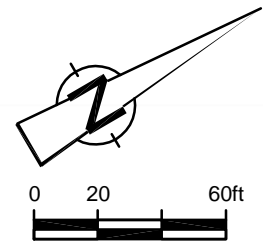


figure 1  
 SITE WORKZONE LAYOUT MAP  
 RRG CLAYTON CHEMICAL  
 Sauget, Illinois



## APPENDIX E

### SUMMARY TABLE OF ANALYTICAL RESULTS FROM GP-2/TP # 6 SAMPLES

RESOURCE RECOVERY GROUP/CLAYTON CHEMICAL COMPANY (RRG/CLAYTON) SITE SOIL BACKHOE (TEST PIT) SAMPLES SOLIDS REMOVAL ACTION ANALYTICAL RESULTS					
USEPA Sample Designation		SS-013-02	SS-013-02	SS-013-02	SS-013-02
Sample Depth		5'	5'	5'	5'
Test Pit ID	IEPA SROs (Construction Worker)	TP # 6	TP # 6	TP # 6	TP # 6
CRA Directed Activity		Overburden	Overburden	Overburden	Overburden
Sample Date		3/23/2006	5/12/2006	5/12/2006	5/12/2006
Sample Time		1530	1321	1324	1321
New Sample ID		59795	S-051206-JW-01ATP6	S-051206-JW-01BTP6	S-051206-JW-01CTP6
New Sample Depth		3'	2'	2'	2'
PID Reading		5000			
Parameter					
RCRA Metals					
Arsenic	61,000	16,000			
Chromium	690,000				
Lead	400,000				
PCBs (µg/Kg)					
Aroclor 1016	1,000	52,000	ND	ND	ND
Aroclor 1221	1,000		ND	ND	ND
Aroclor 1232	1,000		ND	ND	ND
Aroclor 1242	1,000		ND	26,000	5,300
Aroclor 1248	1,000		ND	ND	ND
Aroclor 1254	1,000		130	ND	ND
Aroclor 1260	1,000	32,000	110	30,000	8,300
Ignitability	<200 DEGREES				
SEMIVOLATILE ORGANIC COMPOUNDS					
1,4-Dichlorobenzene	340,000	1,700,000			
1,2-Dichlorobenzene	310,000				
Bis(2-ethylhexyl)phthalate	4,100,000	47			
VOLATILE ORGANIC COMPOUNDS					
Methylene Chloride	34,000	200,000			
1,1,1-Trichloroethane	1,200,000				
Toluene	42,000	1,100,000			
1,1,2-Trichloroethane	1,800,000				
Tetrachloroethene	28,000				
Chlorobenzene	1,300				
Ethylbenzene	58,000				
m&p-Xylene	420,000				
o-Xylene	410,000				
1,3,5-Trimethylbenzene	460				
1,2,4-Trimethylbenzene	730				
1,4-Dichlorobenzene	340,000	1,700,000			
1,2-Dichlorobenzene	310,000				

Notes:

1. All concentrations are reported in parts per billion.
2. Analytical data shown is from samples collected during 2005-06 Removal Action efforts.
3. Analytical data shown is being evaluated against the IEPA Soil Remediation Objectives for Commercial/Industrial Properties, Construction Worker values (IEPA Construction Workers SROs).
4. IEPA Construction Workers SROs (column B) are bolded and italicized for emphasis.
5. Shaded cells are to indicate specific compounds from 2001 Site Assessment that exceeded the evaluation standard (the EPA Region 9 Preliminary Remediation Goals (PRGs)).
6. Shaded and bolded cells represent data that exceeded the IEPA Construction Worker SRO.
7. NR means data was requested but not reported.
8. Blank cells means data was neither requested nor reported.
9. ND means the analyte was not detected.

## APPENDIX F

### SUMMARY TABLE OF ANALYTICAL RESULTS FROM COLLECTED GP-5/TP # 50 SAMPLES

RESOURCE RECOVERY GROUP/CLAYTON CHEMICAL COMPANY (RRG/CLAYTON) SITE SOIL BACKHOE (TEST PITS) SAMPLES SOLIDS REMOVAL ACTION ANALYTICAL RESULTS																	
USEPA Sample Designation		SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08
Sample Depth		5'	5'	5'			5'				5'			5'	5'	5'	5'
Test Pit ID	IEPA SROs (Construction Worker)	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50
CRA Directed Activity		Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden
Sample Date		3/23/2006	4/7/2006	4/7/2006	5/12/2006	5/12/2006	4/7/2006	5/12/2006	5/12/2006	5/12/2006	4/7/2006	5/12/2006	5/12/2006	4/7/2006	4/7/2006	4/7/2006	4/7/2006
Sample Time		1500	1150	1155	1306	1309	1200	1245	1248	1254	1205	1257	1300	1210	1215	1220	1230
New Sample ID		59794	59842	59843	59843A - STL	59843B - STL	59844	59844A - STL	59844B - STL	59844C - STL	59845	59845A - STL	59845B - STL	59846	59847	59848	59849 - DUP K
New Sample Depth		2'	2'	2'			2'				2'			2'	2'	2'	2'
PID Reading		125															
Parameter																	
RCRA Metals																	
Arsenic	61,000	5,700	4,600	6,400	NA	NA	30,400	NA	NA	NA	4,200			4,900	1,700	3,600	4,500
Chromium	690,000	9,700	11,000	18,000	NA	NA	129,000	NA	NA	NA	13,100			30,600	12,300	7,600	68,300
Lead	400,000	50,000	29,000	615,000	NA	NA	1,020,000	NA	NA	NA	59,400			245,000	215,000	85,800	215,000
PCBs (µg/Kg)																	
Aroclor 1016	1,000	5,600	ND	ND	ND	27,000	ND	ND	7,700	10,000	ND	ND	4,900	ND	ND	ND	4,800
Aroclor 1221	1,000				ND	ND		ND	ND	ND		ND	ND				
Aroclor 1232	1,000				ND	ND		ND	ND	ND		ND	ND				
Aroclor 1242	1,000				ND	ND		ND	ND	ND		ND	ND				
Aroclor 1248	1,000				ND	ND		ND	ND	ND		ND	ND				
Aroclor 1254	1,000				1,000	16,000		ND	17,000	21,000		110	4,800				
Aroclor 1260	1,000	2,700	680	36,000	680	20,000	47,000	ND	13,000	17,000	3,800	92	6,300	31,000	14,000	700	5,100
Ignitability	<200 DEGREES	DNI	DNI	DNI			DNI				DNI			DNI	DNI	DNI	DNI
SEMIVOLATILE ORGANIC COMPOUNDS																	
1,4-Dichlorobenzene	340,000	59,000	55	120,000			1,800,000				8,500			4,800	31,000	180	14,000
1,2-Dichlorobenzene	310,000																
Bis(2-ethylhexyl)phthalate	4,100,000	NR															

RESOURCE RECOVERY GROUP/CLAYTON CHEMICAL COMPANY (RRG/CLAYTON) SITE SOIL BACKHOE (TEST PITS) SAMPLES SOLIDS REMOVAL ACTION ANALYTICAL RESULTS																	
USEPA Sample Designation		SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08	SS-013-08
Sample Depth		5'	5'	5'			5'				5'			5'	5'	5'	5'
Test Pit ID	IEPA SROs (Construction Worker)	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50	TP # 50
CRA Directed Activity		Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden
Sample Date		3/23/2006	4/7/2006	4/7/2006	5/12/2006	5/12/2006	4/7/2006	5/12/2006	5/12/2006	5/12/2006	4/7/2006	5/12/2006	5/12/2006	4/7/2006	4/7/2006	4/7/2006	4/7/2006
Sample Time		1500	1150	1155	1306	1309	1200	1245	1248	1254	1205	1257	1300	1210	1215	1220	1230
New Sample ID		59794	59842	59843	59843A - STL	59843B - STL	59844	59844A -STL	59844B -STL	59844C -STL	59845	59845A - STL	59845B - STL	59846	59847	59848	59849 - DUP K
New Sample Depth		2'	2'	2'			2'				2'			2'	2'	2'	2'
PID Reading		125															
Parameter																	
VOLATILE ORGANIC COMPOUNDS																	
Methylene Chloride	34,000	26,000	130	780			1,400				ND			850	800	ND	ND
1,1,1-Trichloroethane	1,200,000																
Toluene	42,000	2,100,000	8,700	1,300,000			19,000				ND			110,000	510,000	120	ND
1,1,2-Trichloroethane	1,800,000	60,000	ND	1,100			620				ND			8,500	9,700	ND	ND
Tetrachloroethene	28,000	270,000	ND	1,400			1,400				ND			7,300	20,000	2,400	ND
Chlorobenzene	1,300																
Ethylbenzene	58,000	400,000		50,000			4,400				ND			11,000	65,000	54	ND
m&p-Xylene	420,000	1,600,000	3,800	190,000			16,000				ND			50,000	250,000	650	ND
o-Xylene	410,000	440,000	1,200	56,000			4,600				ND			11,000	65,000	350	ND
1,3,5-Trimethylbenzene	460	37,000	160	12,000			9,500				ND			4,100	33,000	100	ND
1,2,4-Trimethylbenzene	730	100,000	75	40,000			7,400				ND			2,500	26,000	310	ND
1,4-Dichlorobenzene	340,000	59,000					1,800,000				8,500			4,800	31,000	180	14,000
1,2-Dichlorobenzene	310,000																

Notes:

1. All concentrations are reported in parts per billion.
2. Analytical data shown is from samples collected during 2005-06 Removal Action efforts.
3. Analytical data shown is being evaluated against the IEPA Soil Remediation Objectives for Commercial/Industrial Properties, Construction Worker values (IEPA Construction Workers SROs).
4. IEPA Construction Workers SROs (column B) are bolded and italicized for emphasis.
5. Shaded cells are to indicate specific compounds from 2001 Site Assessment that exceeded the evaluation standard (the EPA Region 9 Preliminary Remediation Goals (PRGs).
6. Shaded and bolded cells represent data that exceeded the IEPA Construction Worker SRO.
7. NR means data was requested but not reported.
8. Blank cells means data was neither requested nor reported.
9. ND means the analyte was not detected.



## APPENDIX G

### SUMMARY TABLE OF ANALYTICAL RESULTS FROM GC EXCAVATION SAMPLES

RESOURCE RECOVERY GROUP/CLAYTON CHEMICAL COMPANY (RRG/CLAYTON) SITE SOLIDS REMOVAL ACTION ANALYTICAL RESULTS TANK FARM OVERBURDEN SAMPLES										
Test Pit ID	IEPA SROs (Construction Worker)	GB	GC	GC	GC	GC	GC	GC	GC/DUP H	GA
CRA Directed Activity		Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden
Sample Date		3/31/2006	3/31/2006	4/28/2006	4/28/2006	4/28/2006	4/28/2006	4/28/2006	3/31/2006	3/31/2006
Sample Time		1115	1230	1320	1325	1335	1345	1355	1300	1315
New Sample ID		59823	59824	59866	59867/DUP of 59866	59868	59869	59870	59825	59826
New Sample Depth		2'	2'	2'	2'	2'	2'	2'	2'	2'
PID Reading		NR	NR	315	315	95	68	175	NR	NR
Parameter										
RCRA Metals										
Arsenic	61,000									
Chromium	690,000									
Lead	400,000									
PCBs										
Aroclor 1016	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	1,000									
Aroclor 1260	1,000	ND	ND	ND	ND	ND	720	ND	ND	ND
Ignitability	<200									
SEMIVOLATILE ORGANIC COMPOUNDS										
1,4-Dichlorobenzene	340,000	ND	1,200	7,200	5,200	ND	ND	ND	1,300	ND
1,2-Dichlorobenzene	310,000	ND	1,300	7,100	5,700	ND	ND	1	1,400	ND
Bis(2-ethylhexyl)phthalate	4,100,000									

RESOURCE RECOVERY GROUP/CLAYTON CHEMICAL COMPANY (RRG/CLAYTON) SITE SOLIDS REMOVAL ACTION ANALYTICAL RESULTS TANK FARM OVERBURDEN SAMPLES										
Test Pit ID	IEPA SROs (Construction Worker)	GB	GC	GC	GC	GC	GC	GC	GC/DUP H	GA
CRA Directed Activity		Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden
Sample Date		3/31/2006	3/31/2006	4/28/2006	4/28/2006	4/28/2006	4/28/2006	4/28/2006	3/31/2006	3/31/2006
Sample Time		1115	1230	1320	1325	1335	1345	1355	1300	1315
New Sample ID		59823	59824	59866	59867/DUP of 59866	59868	59869	59870	59825	59826
New Sample Depth		2'	2'	2'	2'	2'	2'	2'	2'	2'
PID Reading		NR	NR	315	315	95	68	175	NR	NR
VOLATILE ORGANIC COMPOUNDS										
Methylene Chloride	34,000	4.3	ND	590	610	390	6	130	ND	2.3
1,1,1-Trichloroethane	1,200,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	42,000	1.4	18,000	52,000	35,000	170	38	89	29,000	1.2
1,1,2-Trichloroethane	1,800,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	28,000	14	460	3,200	2,400	ND	89	210	1,400	ND
Chlorobenzene	1,300	ND	ND	1,800	1,100	ND	ND	ND	ND	ND
Ethylbenzene	58,000	ND	8,300	17,000	9,500	86	4.6	92	9,300	ND
m&p-Xylene	420,000	ND	45,000	58,000	24,000	560	12	270	46,000	ND
o-Xylene	410,000	ND	16,000	43,000	42,000	320	3.7	110	16,000	ND
1,3,5-Trimethylbenzene	460	NA	NA	NA	NA				NA	NA
1,2,4-Trimethylbenzene	730	ND	7,300	4,300	1,400	780	ND	52	4,900	ND
1,4-Dichlorobenzene	340,000	ND	1,200	7,400	5,200	ND	ND	ND	1,300	ND
1,2-Dichlorobenzene	310,000	ND	1,300	7,100	5,700	ND	ND	1.1	1,400	ND
Vinyl Chloride	1,100			NA	ND	ND	ND	33		

Notes:

1. All concentrations are reported in parts per billion.
2. Analytical data shown is from samples collected during 2005-06 Removal Action efforts.
3. Analytical data shown is being evaluated against the IEPA Soil Remediation Objectives for Commercial/Industrial Properties, Construction Worker values (IEPA Construction Workers SROs).
4. IEPA Construction Workers SROs (column B) are bolded and italicized for emphasis.
5. Shaded cells are to indicate specific compounds from 2001 Site Assessment that exceeded the evaluation standard (the EPA Region 9 Preliminary Remediation Goals (PRGs).
6. Shaded and bolded cells represent data that exceeded the IEPA Construction Worker SRO.
7. NR means data was requested but not reported.
8. Blank cells means data was neither requested nor reported.
9. ND means the analyte was not detected.

## APPENDIX H

### ANALYTICAL REPORT FOR STL GP-2/TP # 6 SAMPLES



**STL**

**STL St. Louis**  
13715 Rider Trail North  
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757  
www.stl-inc.com

## **ANALYTICAL REPORT**

**PROJECT NO. 42190**

**RRG/Clayton Chemical**

**Lot #: F6E120414**

**Dave Hendren**

**Conestoga-Rovers & Associates**  
8615 W. Bryn Mawr  
Chicago, IL 60631

**SEVERN TRENT LABORATORIES, INC.**

A handwritten signature in black ink that reads "Terry Romanko".

**Terry Romanko**  
Project Manager

**May 17, 2006**

**Case Narrative**  
**LOT NUMBER: F6E120414**

This report contains the analytical results for the 10 samples received under chain of custody by STL St. Louis on May 12, 2006. These samples are associated with your RRG/Clayton Chemical project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by STL St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

**PCBs by GC (8082)**

The MSD recovery for Aroclor 1260 is outside the established QC limits. The RPD is not within method acceptance criteria for this analyte (but is acceptable for the other analyte Aroclor 1016). A matrix interference is physically evident in the sample. Method performance is demonstrated by acceptable LCS recovery. Due to matrix interference, only four peaks were used to quantitate the analytes in both the MS/MSD.

**Affected Samples:**

F6E120414 (1): 59844A-TP-50	F6E120414 (6): 59843A-TP-50
F6E120414 (2): 59844B-TP-50	F6E120414 (7): 59843B-TP-50
F6E120414 (3): 59844C-TP-50	F6E120414 (8): S-05206-JW-01ATP6
F6E120414 (4): 59845A-TP-50	F6E120414 (9): S-051206-JW-01BTP6
F6E120414 (5): 59845B-TP-50	F6E120414 (10): S-051206-JW-01CTP6

Due to extract appearance, samples were initially analyzed at a dilution. High concentrations of target analytes warrant the dilutions. The reporting limit has been adjusted for the dilution since no analysis at a lesser dilution was performed. DCB surrogate has been diluted out.

**Affected Samples:**

F6E120414 (2): 59844B-TP-50	F6E120414 (7): 59843B-TP-50
F6E120414 (3): 59844C-TP-50	F6E120414 (9): S-051206-JW-01BTP6
F6E120414 (5): 59845B-TP-50	

During extraction and concentration, the sample could not be brought down to the recommended 10mL. The reporting limit has been elevated accordingly. (This applies to both the 1AC and the 2AC).

**Affected Samples:**

F6E120414 (7): 59843B-TP-50

Sample surrogate recovery is outside established QC limits. This excursion is attributed to a matrix interference which is physically evident in the sample.

**Affected Samples:**

F6E120414 (1): 59844A-TP-50	F6E120414 (6): 59843A-TP-50
F6E120414 (4): 59845A-TP-50	F6E120414 (10): S-051206-JW-01CTP6

The method requires 3-5 peaks be used for PCB quantitation. Due to the presence of multiple aroclors in the sample, only 3 peaks were used for quantitation in the samples.

**Affected Samples:**

- |                             |                                    |
|-----------------------------|------------------------------------|
| F6E120414 (2): 59844B-TP-50 | F6E120414 (7): 59843B-TP-50        |
| F6E120414 (3): 59844C-TP-50 | F6E120414 (8): S-05206-JW-01ATP6   |
| F6E120414 (4): 59845A-TP-50 | F6E120414 (9): S-051206-JW-01BTP6  |
| F6E120414 (5): 59845B-TP-50 | F6E120414 (10): S-051206-JW-01CTP6 |
| F6E120414 (6): 59843A-TP-50 |                                    |

The sample was analyzed at a dilution due to high concentrations of target analytes. The reporting limit has been adjusted only for those targets reported from the dilution run. DCB surrogate has been diluted out.

Dilutions are typically run on the same instrument that the original was reported from. Due to instrument performance, these dilutions were performed on another GC running the same method and calibrated in the same manner and are being reported at this time.

The method requires 3-5 peaks be used for PCB quantitation. Due to the presence of multiple aroclors in the sample, only 3 peaks were used for quantitation.

**Affected Samples:**

- |                             |                                    |
|-----------------------------|------------------------------------|
| F6E120414 (2): 59844B-TP-50 | F6E120414 (9): S-051206-JW-01BTP6  |
| F6E120414 (3): 59844C-TP-50 | F6E120414 (10): S-051206-JW-01CTP6 |
| F6E120414 (7): 59843B-TP-50 |                                    |

METHODS SUMMARY

F6E120414

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
PCBs by SW-846 8082	SW846 8082	SW846 3550B/366

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",  
EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical  
Methods", Third Edition, November 1986 and its updates.



SAMPLE SUMMARY

F6E120414

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
H5CJE	001	59844A-TP-50	05/12/06	12:45
H5CJG	002	59844B-TP-50	05/12/06	12:48
H5CJJ	003	59844C-TP-50	05/12/06	12:54
H5CJK	004	59845A-TP-50	05/12/06	12:57
H5CJL	005	59845B-TP-50	05/12/06	13:00
H5CJM	006	59843A-TP-50	05/12/06	13:06
H5CJN	007	59843B-TP-50	05/12/06	13:09
H5CJR	008	S-05206-JW-01ATP6	05/12/06	13:21
H5CJT	009	S-051206-JW-01BTP6	05/12/06	13:24
H5CJV	010	S-051206-JW-01CTP6	05/12/06	13:27

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-05206-JW-01ATP6

GC Semivolatiles

Lot-Sample #....: F6E120414-008    Work Order #....: H5CJR1AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 13:21    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/15/06  
Prep Batch #....: 6133170    Analysis Time...: 22:02  
Dilution Factor: 1  
% Moisture.....: 32    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	48	ug/kg
Aroclor 1221	ND	48	ug/kg
Aroclor 1232	ND	48	ug/kg
Aroclor 1242	ND	48	ug/kg
Aroclor 1248	ND	48	ug/kg
Aroclor 1254	130	48	ug/kg
Aroclor 1260	110	48	ug/kg
SURROGATE	PERCENT		RECOVERY
	RECOVERY		LIMITS
Decachlorobiphenyl	87		(44 - 150)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-05206-JW-01ATP6

General Chemistry

Lot-Sample #....: F6E120414-008    Work Order #....: H5CJR    Matrix.....: SOLID  
Date Sampled....: 05/12/06 13:21    Date Received...: 05/12/06  
% Moisture.....: 32

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	31.9	0.10	%	MCAWW 160.3 MOD	05/15-05/16/06	6135274
		Dilution Factor: 1		Analysis Time...: 00:00		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-051206-JW-01BTP6

GC Semivolatiles

Lot-Sample #....: F6E120414-009    Work Order #....: H5CJT1AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 13:24    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/15/06  
Prep Batch #....: 6133170    Analysis Time...: 23:57  
Dilution Factor: 10  
% Moisture.....: 6.5    Method.....: SW846 8082

		REPORTING	
PARAMETER	RESULT	LIMIT	UNITS
Aroclor 1016	ND	350	ug/kg
Aroclor 1221	ND	350	ug/kg
Aroclor 1232	ND	350	ug/kg
Aroclor 1242	34000 D,E	350	ug/kg
Aroclor 1248	ND	350	ug/kg
Aroclor 1254	ND	350	ug/kg
Aroclor 1260	28000 D,E	350	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Decachlorobiphenyl	0.0 DIL,*	(44 - 150)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

E Estimated result. Result concentration exceeds the calibration range.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-051206-JW-01BTP6

GC Semivolatiles

Lot-Sample #....: F6E120414-009    Work Order #....: H5CJT2AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 13:24    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/17/06  
Prep Batch #....: 6133170    Analysis Time...: 11:48  
Dilution Factor: 100  
% Moisture.....: 6.5    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1242	26000 D	3500	ug/kg
Aroclor 1260	30000 D	3500	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Decachlorobiphenyl	0.0 DIL, *	(44 - 150)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.  
\* Surrogate recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.  
D Result was obtained from the analysis of a dilution.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-051206-JW-01BTP6

General Chemistry

Lot-Sample #...: F6E120414-009    Work Order #...: H5CJT    Matrix.....: SOLID  
Date Sampled...: 05/12/06 13:24    Date Received...: 05/12/06  
% Moisture.....: 6.5

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	6.5	0.10	%	MCAWW 160.3 MOD	05/15-05/16/06	6135274
		Dilution Factor: 1		Analysis Time...: 00:00		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-051206-JW-01CTP6

GC Semivolatiles

Lot-Sample #...: F6E120414-010    Work Order #...: H5CJV1AC    Matrix.....: SOLID  
Date Sampled...: 05/12/06 13:27    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/15/06  
Prep Batch #...: 6133170    Analysis Time...: 22:18  
Dilution Factor: 1  
% Moisture.....: 8.0    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	36	ug/kg
Aroclor 1221	ND	36	ug/kg
Aroclor 1232	ND	36	ug/kg
Aroclor 1242	6100 E	36	ug/kg
Aroclor 1248	ND	36	ug/kg
Aroclor 1254	ND	36	ug/kg
Aroclor 1260	8100 E	36	ug/kg
		PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS	
Decachlorobiphenyl	450 *	(44 - 150)	

**NOTE (S) :**

---

\* Surrogate recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.  
E Estimated result. Result concentration exceeds the calibration range.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-051206-JW-01CTP6

GC Semivolatiles

Lot-Sample #....: F6E120414-010    Work Order #....: H5CJV2AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 13:27    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/17/06  
Prep Batch #....: 6133170    Analysis Time...: 12:03  
Dilution Factor: 20  
% Moisture.....: 8.0    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1242	5300 D	720	ug/kg
Aroclor 1260	8300 D	720	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Decachlorobiphenyl	0.0 DIL, *	(44 - 150)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.  
\* Surrogate recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.  
D Result was obtained from the analysis of a dilution.



Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-051206-JW-01CTP6

General Chemistry

Lot-Sample #...: F6E120414-010    Work Order #...: H5CJV    Matrix.....: SOLID  
Date Sampled...: 05/12/06 13:27    Date Received...: 05/12/06  
% Moisture.....: 8.0

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	8.0	0.10	%	MCAWW 160.3 MOD	05/15-05/16/06	6135274
		Dilution Factor: 1		Analysis Time...: 00:00		

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F6E120414  
MB Lot-Sample #: F6E130000-170  
Analysis Date...: 05/15/06  
Dilution Factor: 1

Work Order #...: H5DG41AA  
Prep Date.....: 05/13/06  
Prep Batch #...: 6133170

Matrix.....: SOLID  
Analysis Time...: 20:07

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082
SURROGATE	PERCENT	RECOVERY		
	RECOVERY	LIMITS		
Decachlorobiphenyl	108	(44 - 150)		

NOTE (S) :

---

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F6E120414      Work Order #...: H5DG41AC      Matrix.....: SOLID  
LCS Lot-Sample#: F6E130000-170  
Prep Date.....: 05/13/06      Analysis Date...: 05/15/06  
Prep Batch #...: 6133170      Analysis Time...: 20:24  
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Aroclor 1016	101	(68 - 145)	SW846 8082
Aroclor 1260	102	(73 - 137)	SW846 8082

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Decachlorobiphenyl	105	(66 - 159)

**NOTE (S) :**

---

Calculations are performed before rounding to avoid round-off errors in calculated results.  
Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F6E120414      Work Order #...: H5CJE1AD-MS      Matrix.....: SOLID  
MS Lot-Sample #: F6E120414-001      H5CJE1AE-MSD  
Date Sampled...: 05/12/06 12:45      Date Received...: 05/12/06  
Prep Date.....: 05/13/06      Analysis Date...: 05/15/06  
Prep Batch #...: 6133170      Analysis Time...: 20:56  
Dilution Factor: 1      % Moisture.....: 26

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Aroclor 1016	116	(55 - 146)			SW846 8082
	111	(55 - 146)	4.1	(0-30)	SW846 8082
Aroclor 1260	129	(35 - 150)			SW846 8082
	231 a,p	(35 - 150)	57	(0-30)	SW846 8082

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Decachlorobiphenyl	141	(44 - 150)
	110	(44 - 150)

NOTE (S) :

- Calculations are performed before rounding to avoid round-off errors in calculated results.
- Bold print denotes control parameters
- Results and reporting limits have been adjusted for dry weight.
- a Spiked analyte recovery is outside stated control limits.
- p Relative percent difference (RPD) is outside stated control limits.

# General Chemistry

		DUPLICATE			RPD		PREPARATION-	PREP
PARAM	RESULT	RESULT	UNITS	RPD	LIMIT	METHOD	ANALYSIS DATE	BATCH #
Percent Moisture						SD Lot-Sample #:	F6E120116-001	
	37.5	35.5	%	5.4	(0-30)	MCAWW 160.3 MOD	05/15-05/16/06	6135274
				Dilution Factor: 1	Analysis Time.: 00:00			

**SEVERN  
TRENT**  
**STL**  
Severn Trent Laboratories, Inc.

CUR #2475

**Chain of  
Custody Record**

STL-4124 (0801)		Client		Project Manager		Date		Chain of Custody Number	
CONESTOGA-ROVERS & ASSOCIATES		DAVE HENDREN		05/12/06		264952			
Address		Telephone Number (Area Code)/Fax Number		Lab Number		Page		or	
8615 W. BRYN MAWR AVE		773-380-9933				1		1	
City		Site Contact		Lab Contact		Analysis (Attach list if more space is needed)		Special Instructions/ Conditions of Receipt	
CHICAGO		JOHN WEINBERGER		TEREY ROMANO				STANDARD ANALYSIS LIST ON ALL	
Project Name and Location (State)		Carrier/Waybill Number		Containers & Preservatives					
RRG/CLAYTON SITE, SAUCET IL HAND DELIVERED BY JW									
Contract/Purchase Order/Quote No.		Matrix		Matrix					
CRA MASTER									
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Date		Time		Air		Aqueous	
59844A-TP-50		05/12/06		12:45				X	
59844B-TP-50		05/12/06		12:48				X	
59844C-TP-50		05/12/06		12:54				X	
59845A-TP-50		05/12/06		12:57				X	
59845B-TP-50		05/12/06		13:00				X	
59845C-TP-50		05/12/06		13:06				X	
59843A-TP-50		05/12/06		13:09				X	
59843B-TP-50		05/12/06		13:21				X	
59843C-TP-50		05/12/06		13:24				X	
59843D-TP-50		05/12/06		13:27				X	
59845E-TP-50		05/12/06		13:27				X	
59845F-TP-50		05/12/06		13:27				X	
59845G-TP-50		05/12/06		13:27				X	
59845H-TP-50		05/12/06		13:27				X	
59845I-TP-50		05/12/06		13:27				X	
59845J-TP-50		05/12/06		13:27				X	
59845K-TP-50		05/12/06		13:27				X	
59845L-TP-50		05/12/06		13:27				X	
59845M-TP-50		05/12/06		13:27				X	
59845N-TP-50		05/12/06		13:27				X	
59845O-TP-50		05/12/06		13:27				X	
59845P-TP-50		05/12/06		13:27				X	
59845Q-TP-50		05/12/06		13:27				X	
59845R-TP-50		05/12/06		13:27				X	
59845S-TP-50		05/12/06		13:27				X	
59845T-TP-50		05/12/06		13:27				X	
59845U-TP-50		05/12/06		13:27				X	
59845V-TP-50		05/12/06		13:27				X	
59845W-TP-50		05/12/06		13:27				X	
59845X-TP-50		05/12/06		13:27				X	
59845Y-TP-50		05/12/06		13:27				X	
59845Z-TP-50		05/12/06		13:27				X	
59846A-TP-50		05/12/06		13:27				X	
59846B-TP-50		05/12/06		13:27				X	
59846C-TP-50		05/12/06		13:27				X	
59846D-TP-50		05/12/06		13:27				X	
59846E-TP-50		05/12/06		13:27				X	
59846F-TP-50		05/12/06		13:27				X	
59846G-TP-50		05/12/06		13:27				X	
59846H-TP-50		05/12/06		13:27				X	
59846I-TP-50		05/12/06		13:27				X	
59846J-TP-50		05/12/06		13:27				X	
59846K-TP-50		05/12/06		13:27				X	
59846L-TP-50		05/12/06		13:27				X	
59846M-TP-50		05/12/06		13:27				X	
59846N-TP-50		05/12/06		13:27				X	
59846O-TP-50		05/12/06		13:27				X	
59846P-TP-50		05/12/06		13:27				X	
59846Q-TP-50		05/12/06		13:27				X	
59846R-TP-50		05/12/06		13:27				X	
59846S-TP-50		05/12/06		13:27				X	
59846T-TP-50		05/12/06		13:27				X	
59846U-TP-50		05/12/06		13:27				X	
59846V-TP-50		05/12/06		13:27				X	
59846W-TP-50		05/12/06		13:27				X	
59846X-TP-50		05/12/06		13:27				X	
59846Y-TP-50		05/12/06		13:27				X	
59846Z-TP-50		05/12/06		13:27				X	
59847A-TP-50		05/12/06		13:27				X	
59847B-TP-50		05/12/06		13:27				X	
59847C-TP-50		05/12/06		13:27				X	
59847D-TP-50		05/12/06		13:27				X	
59847E-TP-50		05/12/06		13:27				X	
59847F-TP-50		05/12/06		13:27				X	
59847G-TP-50		05/12/06		13:27				X	
59847H-TP-50		05/12/06		13:27				X	
59847I-TP-50		05/12/06		13:27				X	
59847J-TP-50		05/12/06		13:27				X	
59847K-TP-50		05/12/06		13:27				X	
59847L-TP-50		05/12/06		13:27				X	
59847M-TP-50		05/12/06		13:27				X	
59847N-TP-50		05/12/06		13:27				X	
59847O-TP-50		05/12/06		13:27				X	
59847P-TP-50		05/12/06		13:27				X	
59847Q-TP-50		05/12/06		13:27				X	
59847R-TP-50		05/12/06		13:27				X	
59847S-TP-50		05/12/06		13:27				X	
59847T-TP-50		05/12/06		13:27				X	
59847U-TP-50		05/12/06		13:27				X	
59847V-TP-50		05/12/06		13:27				X	
59847W-TP-50		05/12/06		13:27				X	
59847X-TP-50		05/12/06		13:27				X	
59847Y-TP-50		05/12/06		13:27				X	
59847Z-TP-50		05/12/06		13:27				X	
59848A-TP-50		05/12/06		13:27				X	
59848B-TP-50		05/12/06		13:27				X	
59848C-TP-50		05/12/06		13:27				X	
59848D-TP-50		05/12/06		13:27				X	
59848E-TP-50		05/12/06		13:27				X	
59848F-TP-50		05/12/06		13:27				X	
59848G-TP-50		05/12/06		13:27				X	
59848H-TP-50		05/12/06		13:27				X	
59848I-TP-50		05/12/06		13:27				X	
59848J-TP-50		05/12/06		13:27				X	
59848K-TP-50		05/12/06		13:27				X	
59848L-TP-50		05/12/06		13:27				X	
59848M-TP-50		05/12/06		13:27				X	
59848N-TP-50		05/12/06		13:27				X	
59848O-TP-50		05/12/06		13:27				X	
59848P-TP-50		05/12/06		13:27				X	
59848Q-TP-50		05/12/06		13:27				X	
59848R-TP-50		05/12/06		13:27				X	
59848S-TP-50		05/12/06		13:27				X	
59848T-TP-50		05/12/06		13:27				X	
59848U-TP-50		05/12/06		13:27				X	
59848V-TP-50		05/12/06		13:27				X	
59848W-TP-50		05/12/06		13:27				X	
59848X-TP-50		05/12/06		13:27				X	
59848Y-TP-50		05/12/06		13:27				X	
59848Z-TP-50		05/12/06		13:27				X	
59849A-TP-50		05/12/06		13:27				X	
59849B-TP-50		05/12/06		13:27				X	
59849C-TP-50		05/12/06		13:27				X	
59849D-TP-50		05/12/06		13:27				X	
59849E-TP-50		05/12/06		13:27				X	
59849F-TP-50		05/12/06		13:27				X	
59849G-TP-50		05/12/06		13:27				X	
59849H-TP-50		05/12/06		13:27				X	
59849I-TP-50		05/12/06		13:27				X	
59849J-TP-50		05/12/06		13:27				X	
59849K-TP-50		05/12/06		13:27				X	
59849L-TP-50		05/12/06		13:27				X	
59849M-TP-50		05/12/06		13:27				X	
59849N-TP-50		05/12/06		13:27				X	
59849O-TP-50		05/12/06		13:27				X	
59849P-TP-50		05/12/06		13:27				X	
59849Q-TP-50		05/12/06		13:27				X	
59849R-TP-50		05/12/06		13:27				X	
59849S-TP-50		05/12/06		13:27				X	
59849T-TP-50		05/12/06		13:27				X	
59849U-TP-50		05/12/06		13:27				X	
59849V-TP-50		05/12/06		13:27				X	
59849W-TP-50		05/12/06		13:27				X	
59849X-TP-50		05/12/06		13:27				X	
59849Y-TP-50		05/12/06		13:27				X	
59849Z-TP-50		05/12/06		13:27				X	
59850A-TP-50		05/12/06		13:27				X	
59850B-TP-50		05/12/06		13:27				X	
59850C-TP-50		05/12/06		13:27				X	
59850D-TP-50		05/12/06		13:27				X	
59850E-TP-50		05/12/06		13:27				X	
59850F-TP-50		05/12/06		13:27				X	
59850G-TP-50		05/12/06		13:27				X	
59850H-TP-50		05/12/06		13:27				X	
59850I-TP-50		05/12/06		13:27				X	
59850J-TP-50		05/12/06		13:27				X	
59850K-TP-50		05/12/06		13:27				X	
59850L-TP-50		05/12/06		13:27				X	
59850M-TP-50		05/12/06		13:27				X	
59850N-TP-50		05/12/06		13:27				X	
59850O-TP-50		05/12/06		13:27				X	
59850P-TP-50		05/12/06		13:27				X	
59850Q-TP-50		05/12/06		13:27				X	
59850R-TP-50		05/12/06		13:27				X	
59850S-TP-50		05/12/06		13:27				X	
59850T-TP-50		05/12/06		13:27				X	
59850U-TP-50		05/12/06		13:27				X	
59850V-TP-50		05/12/06		13:27				X	
59850W-TP-50		05/12/06		13:27				X	
59850X-TP-50		05/12/06		13:27				X	
59850Y-TP-50		05/12/06		13:27				X	
59850Z-TP-50		05/12/06		13:27				X	
59851A-TP-50		05/12/06		13:27				X	
59851B-TP-50		05/12/06		13:27				X	
59851C-TP-50		05/12/06		13:27				X	
59851D-TP-50		05/12/06		13:27				X	
59851E-TP-50		05/12/06		13:27				X	
59851F-TP-50		05/12/06		13:27				X	
59851G-TP-50		05/12/06		13:27				X	

Lot #(s): F6E120414  
- 2475 -

Client: CRA Condition Upon Receipt Form  
Quote No: 69891 COC/RFA No: 264952 Date: 05-12-06  
Initiated By: NM Time: 1625  
NM 05-12-06

Shipping Information  
Shipper Name: client  
Shipping # (s):\*  
1. N/A 6. \_\_\_\_\_ Multiple Packages Y N N/A  
Sample Temperature (s):\*\*  
1. 4°C 6. \_\_\_\_\_  
2. \_\_\_\_\_ 7. \_\_\_\_\_  
3. \_\_\_\_\_ 8. \_\_\_\_\_  
4. \_\_\_\_\_ 9. \_\_\_\_\_  
5. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines  
\*\*Sample must be received at 4°C ± 2°C. If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):					
1.	Y (N)	Was sample received broken?	8.	Y N	Sample received with Chain of Custody?
2.	Y N (N/A)	Was sample received with proper pH <sup>1</sup> ? (If not, make note below)	9.	Y (N)	Chain of Custody matches sample ID's on container(s)?
3.	Y (N)	If N/A-Was pH taken by original STL Lab?	10.	Y (N)	Are there custody seals present on cooler?
4.	(Y) N	Sample received in proper containers?	11.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?
5.	(Y) N	Sample volume sufficient for analysis?	12.	Y (N)	Are there custody seals present on bottles?
6.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
7.	(Y) N	Were contents of the cooler were frisked after opening	14.	Y (N)	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.  
Notes: For 59844C-TP-50 the sample label said 59845C-TP-50, but the sample lid matched the chain.

Corrective Action:  
☐ Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
☐ Sample(s) processed "as is"  
☐ Sample(s) on hold until: \_\_\_\_\_ If released, notify: \_\_\_\_\_  
Project Management Review: [Signature] Date: 05-15-06  
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

## APPENDIX I

### ANALYTICAL REPORT FOR STL GP-5/TP # 50 SAMPLES





**STL**

**STL St. Louis**  
13715 Rider Trail North  
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757  
www.stl-inc.com

## **ANALYTICAL REPORT**

**PROJECT NO. 42190**

**RRG/Clayton Chemical**

**Lot #: F6E120414**

**Dave Hendren**

**Conestoga-Rovers & Associates**  
8615 W. Bryn Mawr  
Chicago, IL 60631

**SEVERN TRENT LABORATORIES, INC.**

A handwritten signature in black ink that reads "Terry Romanko".

**Terry Romanko**  
Project Manager

**May 17, 2006**

**Case Narrative**  
**LOT NUMBER: F6E120414**

This report contains the analytical results for the 10 samples received under chain of custody by STL St. Louis on May 12, 2006. These samples are associated with your RRG/Clayton Chemical project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by STL St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

**PCBs by GC (8082)**

The MSD recovery for Aroclor 1260 is outside the established QC limits. The RPD is not within method acceptance criteria for this analyte (but is acceptable for the other analyte Aroclor 1016). A matrix interference is physically evident in the sample. Method performance is demonstrated by acceptable LCS recovery. Due to matrix interference, only four peaks were used to quantitate the analytes in both the MS/MSD.

**Affected Samples:**

F6E120414 (1): 59844A-TP-50	F6E120414 (6): 59843A-TP-50
F6E120414 (2): 59844B-TP-50	F6E120414 (7): 59843B-TP-50
F6E120414 (3): 59844C-TP-50	F6E120414 (8): S-05206-JW-01ATP6
F6E120414 (4): 59845A-TP-50	F6E120414 (9): S-051206-JW-01BTP6
F6E120414 (5): 59845B-TP-50	F6E120414 (10): S-051206-JW-01CTP6

Due to extract appearance, samples were initially analyzed at a dilution. High concentrations of target analytes warrant the dilutions. The reporting limit has been adjusted for the dilution since no analysis at a lesser dilution was performed. DCB surrogate has been diluted out.

**Affected Samples:**

F6E120414 (2): 59844B-TP-50	F6E120414 (7): 59843B-TP-50
F6E120414 (3): 59844C-TP-50	F6E120414 (9): S-051206-JW-01BTP6
F6E120414 (5): 59845B-TP-50	

During extraction and concentration, the sample could not be brought down to the recommended 10mL. The reporting limit has been elevated accordingly. (This applies to both the 1AC and the 2AC).

**Affected Samples:**

F6E120414 (7): 59843B-TP-50

Sample surrogate recovery is outside established QC limits. This excursion is attributed to a matrix interference which is physically evident in the sample.

**Affected Samples:**

F6E120414 (1): 59844A-TP-50	F6E120414 (6): 59843A-TP-50
F6E120414 (4): 59845A-TP-50	F6E120414 (10): S-051206-JW-01CTP6

The method requires 3-5 peaks be used for PCB quantitation. Due to the presence of multiple aroclors in the sample, only 3 peaks were used for quantitation in the samples.

**Affected Samples:**

- |                             |                                    |
|-----------------------------|------------------------------------|
| F6E120414 (2): 59844B-TP-50 | F6E120414 (7): 59843B-TP-50        |
| F6E120414 (3): 59844C-TP-50 | F6E120414 (8): S-05206-JW-01ATP6   |
| F6E120414 (4): 59845A-TP-50 | F6E120414 (9): S-051206-JW-01BTP6  |
| F6E120414 (5): 59845B-TP-50 | F6E120414 (10): S-051206-JW-01CTP6 |
| F6E120414 (6): 59843A-TP-50 |                                    |

The sample was analyzed at a dilution due to high concentrations of target analytes. The reporting limit has been adjusted only for those targets reported from the dilution run. DCB surrogate has been diluted out.

Dilutions are typically run on the same instrument that the original was reported from. Due to instrument performance, these dilutions were performed on another GC running the same method and calibrated in the same manner and are being reported at this time.

The method requires 3-5 peaks be used for PCB quantitation. Due to the presence of multiple aroclors in the sample, only 3 peaks were used for quantitation.

**Affected Samples:**

- |                             |                                    |
|-----------------------------|------------------------------------|
| F6E120414 (2): 59844B-TP-50 | F6E120414 (9): S-051206-JW-01BTP6  |
| F6E120414 (3): 59844C-TP-50 | F6E120414 (10): S-051206-JW-01CTP6 |
| F6E120414 (7): 59843B-TP-50 |                                    |

METHODS SUMMARY

F6E120414

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
PCBs by SW-846 8082	SW846 8082	SW846 3550B/366

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",  
EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical  
Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F6E120414

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
H5CJE	001	59844A-TP-50	05/12/06	12:45
H5CJG	002	59844B-TP-50	05/12/06	12:48
H5CJJ	003	59844C-TP-50	05/12/06	12:54
H5CJK	004	59845A-TP-50	05/12/06	12:57
H5CJL	005	59845B-TP-50	05/12/06	13:00
H5CJM	006	59843A-TP-50	05/12/06	13:06
H5CJN	007	59843B-TP-50	05/12/06	13:09
H5CJR	008	S-05206-JW-01ATP6	05/12/06	13:21
H5CJT	009	S-051206-JW-01BTP6	05/12/06	13:24
H5CJV	010	S-051206-JW-01CTP6	05/12/06	13:27

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59844A-TP-50

GC Semivolatiles

Lot-Sample #....: F6E120414-001    Work Order #....: H5CJE1AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 12:45    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/15/06  
Prep Batch #....: 6133170    Analysis Time...: 20:40  
Dilution Factor: 1  
% Moisture.....: 26    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	45	ug/kg
Aroclor 1221	ND	45	ug/kg
Aroclor 1232	ND	45	ug/kg
Aroclor 1242	ND	45	ug/kg
Aroclor 1248	ND	45	ug/kg
Aroclor 1254	ND	45	ug/kg
Aroclor 1260	ND	45	ug/kg
		PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS	
Decachlorobiphenyl	211 *	(44 - 150)	

NOTE (S) :  
\* Surrogate recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59844A-TP-50

General Chemistry

Lot-Sample #....: F6E120414-001    Work Order #....: H5CJE    Matrix.....: SOLID  
Date Sampled....: 05/12/06 12:45    Date Received...: 05/12/06  
% Moisture.....: 26

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	26.4	0.10	%	MCAWW 160.3 MOD	05/15-05/16/06	6135274
		Dilution Factor: 1		Analysis Time...: 00:00		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59844B-TP-50

GC Semivolatiles

Lot-Sample #....: F6E120414-002    Work Order #....: H5CJG1AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 12:48    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/15/06  
Prep Batch #....: 6133170    Analysis Time...: 22:51  
Dilution Factor: 10  
% Moisture.....: 10    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	7700 D	370	ug/kg
Aroclor 1221	ND	370	ug/kg
Aroclor 1232	ND	370	ug/kg
Aroclor 1242	ND	370	ug/kg
Aroclor 1248	ND	370	ug/kg
Aroclor 1254	16000 D,E	370	ug/kg
Aroclor 1260	13000 D	370	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	0.0 DIL, *	(44 - 150)

**NOTE (S) :**

---

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

E Estimated result. Result concentration exceeds the calibration range.



Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59844B-TP-50

GC Semivolatiles

Lot-Sample #...: F6E120414-002    Work Order #...: H5CJG2AC    Matrix.....: SOLID  
Date Sampled...: 05/12/06 12:48    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/17/06  
Prep Batch #...: 6133170    Analysis Time...: 11:05  
Dilution Factor: 100  
% Moisture.....: 10    Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
Aroclor 1254	17000 D	3700	ug/kg
<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	
Decachlorobiphenyl	0.0 DIL, *	(44 - 150)	

**NOTE (S) :**

---

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59844B-TP-50

General Chemistry

Lot-Sample #....: F6E120414-002    Work Order #....: H5CJG    Matrix.....: SOLID  
Date Sampled....: 05/12/06 12:48    Date Received...: 05/12/06  
% Moisture.....: 10

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	10.2	0.10	%	MCAWW 160.3 MOD	05/15-05/16/06	6135274
		Dilution Factor: 1		Analysis Time...: 00:00		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59844C-TP-50

GC Semivolatiles

Lot-Sample #....: F6E120414-003    Work Order #....: H5CJJ1AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 12:54    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/15/06  
Prep Batch #....: 6133170    Analysis Time...: 23:08  
Dilution Factor: 10  
% Moisture.....: 10    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	10000 D	370	ug/kg
Aroclor 1221	ND	370	ug/kg
Aroclor 1232	ND	370	ug/kg
Aroclor 1242	ND	370	ug/kg
Aroclor 1248	ND	370	ug/kg
Aroclor 1254	20000 D,E	370	ug/kg
Aroclor 1260	17000 D,E	370	ug/kg
	PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS	
Decachlorobiphenyl	0.0 DIL, *	(44 - 150)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

E Estimated result. Result concentration exceeds the calibration range.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59844C-TP-50

GC Semivolatiles

Lot-Sample #....: F6E120414-003    Work Order #....: H5CJJ2AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 12:54    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/17/06  
Prep Batch #....: 6133170    Analysis Time...: 11:20  
Dilution Factor: 100  
% Moisture.....: 10    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1254	21000 D	3700	ug/kg
Aroclor 1260	17000 D	3700	ug/kg
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
Decachlorobiphenyl	0.0 DIL, *	(44 - 150)	

NOTE (S) :

- DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.
- \* Surrogate recovery is outside stated control limits.
- Results and reporting limits have been adjusted for dry weight.
- D Result was obtained from the analysis of a dilution.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59844C-TP-50

General Chemistry

Lot-Sample #...: F6E120414-003    Work Order #...: H5CJJ    Matrix.....: SOLID  
Date Sampled...: 05/12/06 12:54    Date Received...: 05/12/06  
% Moisture.....: 10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	10.1	0.10	%	MCAWW 160.3 MOD	05/15-05/16/06	6135274
		Dilution Factor: 1		Analysis Time...: 00:00		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59845A-TP-50

GC Semivolatiles

Lot-Sample #....: F6E120414-004    Work Order #....: H5CJ1AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 12:57    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/15/06  
Prep Batch #....: 6133170    Analysis Time...: 21:29  
Dilution Factor: 1  
% Moisture.....: 19    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	110	41	ug/kg
Aroclor 1260	92	41	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	172 *	(44 - 150)

NOTE (S) :

---

\* Surrogate recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59845A-TP-50

General Chemistry

Lot-Sample #...: F6E120414-004    Work Order #...: H5CJK    Matrix.....: SOLID  
Date Sampled...: 05/12/06 12:57    Date Received...: 05/12/06  
% Moisture.....: 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	19.1	0.10	%	MCAWW 160.3 MOD	05/15-05/16/06	6135274
		Dilution Factor: 1		Analysis Time...: 00:00		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59845B-TP-50

GC Semivolatiles

Lot-Sample #....: F6E120414-005    Work Order #....: H5CJL1AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 13:00    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/15/06  
Prep Batch #....: 6133170    Analysis Time...: 23:24  
Dilution Factor: 10  
% Moisture.....: 13    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	4900 D	380	ug/kg
Aroclor 1221	ND	380	ug/kg
Aroclor 1232	ND	380	ug/kg
Aroclor 1242	ND	380	ug/kg
Aroclor 1248	ND	380	ug/kg
Aroclor 1254	4800 D	380	ug/kg
Aroclor 1260	6300 D	380	ug/kg
		PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS	
Decachlorobiphenyl	0.0 DIL, *	(44 - 150)	

**NOTE (S) :**

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.



Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59845B-TP-50

General Chemistry

Lot-Sample #...: F6E120414-005    Work Order #...: H5CJL    Matrix.....: SOLID  
Date Sampled...: 05/12/06 13:00    Date Received...: 05/12/06  
% Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	13.0	0.10	%	MCAWW 160.3 MOD	05/15-05/16/06	6135274
		Dilution Factor: 1		Analysis Time...: 00:00		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59843A-TP-50

GC Semivolatiles

Lot-Sample #....: F6E120414-006    Work Order #....: H5CJM1AC    Matrix.....: SOLID  
Date Sampled....: 05/12/06 13:06    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/15/06  
Prep Batch #....: 6133170    Analysis Time...: 21:46  
Dilution Factor: 1  
% Moisture.....: 14    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
Aroclor 1248	ND	38	ug/kg
Aroclor 1254	1000	38	ug/kg
Aroclor 1260	680	38	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	151 *	(44 - 150)

NOTE (S) :

\* Surrogate recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59843A-TP-50

General Chemistry

Lot-Sample #....: F6E120414-006    Work Order #....: H5CJM    Matrix.....: SOLID  
Date Sampled....: 05/12/06 13:06    Date Received...: 05/12/06  
% Moisture.....: 14

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	14.0	0.10	%	MCAWW 160.3 MOD	05/15-05/16/06	6135274
		Dilution Factor: 1		Analysis Time...: 00:00		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59843B-TP-50

GC Semivolatiles

Lot-Sample #...: F6E120414-007    Work Order #...: H5CJN1AC    Matrix.....: SOLID  
Date Sampled...: 05/12/06 13:09    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/15/06  
Prep Batch #...: 6133170    Analysis Time...: 23:41  
Dilution Factor: 10  
% Moisture.....: 15    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	44000 D,E	580	ug/kg
Aroclor 1221	ND	580	ug/kg
Aroclor 1232	ND	580	ug/kg
Aroclor 1242	ND	580	ug/kg
Aroclor 1248	ND	580	ug/kg
Aroclor 1254	21000 D,E	580	ug/kg
Aroclor 1260	27000 D,E	580	ug/kg
		PERCENT	RECOVERY
SURROGATE	RECOVERY	LIMITS	
Decachlorobiphenyl	0.0 DIL, *	(44 - 150)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

E Estimated result. Result concentration exceeds the calibration range.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59843B-TP-50

GC Semivolatiles

Lot-Sample #...: F6E120414-007    Work Order #...: H5CJN2AC    Matrix.....: SOLID  
Date Sampled...: 05/12/06 13:09    Date Received...: 05/12/06  
Prep Date.....: 05/13/06    Analysis Date...: 05/17/06  
Prep Batch #...: 6133170    Analysis Time...: 11:34  
Dilution Factor: 100  
% Moisture.....: 15    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Aroclor 1016	27000 D	3900	ug/kg
Aroclor 1254	16000 D	3900	ug/kg
Aroclor 1260	20000 D	3900	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	0.0 DIL, *	(44 - 150)

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

D Result was obtained from the analysis of a dilution.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59843B-TP-50

General Chemistry

Lot-Sample #...: F6E120414-007    Work Order #...: H5CJN    Matrix.....: SOLID  
Date Sampled...: 05/12/06 13:09    Date Received...: 05/12/06  
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	15.2	0.10	%	MCAWW 160.3 MOD	05/15-05/16/06	6135274
		Dilution Factor: 1		Analysis Time...: 00:00		

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F6E120414

MB Lot-Sample #: F6E130000-170

Analysis Date...: 05/15/06

Dilution Factor: 1

Work Order #...: H5DG41AA

Prep Date.....: 05/13/06

Prep Batch #...: 6133170

Matrix.....: SOLID

Analysis Time...: 20:07

		REPORTING		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1221	ND	33	ug/kg	SW846 8082
Aroclor 1232	ND	33	ug/kg	SW846 8082
Aroclor 1242	ND	33	ug/kg	SW846 8082
Aroclor 1248	ND	33	ug/kg	SW846 8082
Aroclor 1254	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082
	PERCENT	RECOVERY		
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
Decachlorobiphenyl	108	(44 - 150)		

NOTE (S) :

---

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F6E120414      Work Order #...: H5DG41AC      Matrix.....: SOLID  
LCS Lot-Sample#: F6E130000-170  
Prep Date.....: 05/13/06      Analysis Date...: 05/15/06  
Prep Batch #...: 6133170      Analysis Time...: 20:24  
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Aroclor 1016	101	(68 - 145)	SW846 8082
Aroclor 1260	102	(73 - 137)	SW846 8082

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Decachlorobiphenyl	105	(66 - 159)

**NOTE (S) :**

---

Calculations are performed before rounding to avoid round-off errors in calculated results.  
Bold print denotes control parameters



MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F6E120414      Work Order #...: H5CJE1AD-MS      Matrix.....: SOLID  
MS Lot-Sample #: F6E120414-001      H5CJE1AE-MSD  
Date Sampled...: 05/12/06 12:45      Date Received...: 05/12/06  
Prep Date.....: 05/13/06      Analysis Date...: 05/15/06  
Prep Batch #...: 6133170      Analysis Time...: 20:56  
Dilution Factor: 1      % Moisture.....: 26

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	116	(55 - 146)			SW846 8082
	111	(55 - 146)	4.1	(0-30)	SW846 8082
Aroclor 1260	129	(35 - 150)			SW846 8082
	231 a,p	(35 - 150)	57	(0-30)	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	141	(44 - 150)
	110	(44 - 150)

NOTE (S) :

- Calculations are performed before rounding to avoid round-off errors in calculated results.
- Bold print denotes control parameters
- Results and reporting limits have been adjusted for dry weight.
- a Spiked analyte recovery is outside stated control limits.
- p Relative percent difference (RPD) is outside stated control limits.

# General Chemistry

		DUPLICATE			RPD		PREPARATION-	PREP
PARAM	RESULT	RESULT	UNITS	RPD	LIMIT	METHOD	ANALYSIS DATE	BATCH #
Percent Moisture						SD Lot-Sample #:	F6E120116-001	
	37.5	35.5	%	5.4	(0-30)	MCAWW 160.3 MOD	05/15-05/16/06	6135274
				Dilution Factor: 1	Analysis Time.: 00:00			

**SEVERN  
TRENT**  
**STL**  
Severn Trent Laboratories, Inc.

CUR #2475

**Chain of  
Custody Record**

STL-4124 (0801)		Client		Project Manager		Date		Chain of Custody Number																					
CONESTOGA-ROVERS & ASSOCIATES		DAVE HENDREN		05/12/06		264952																							
Address		Telephone Number (Area Code)/Fax Number		Lab Number		Page		or																					
8615 W. BRYN MAWR AVE		773-380-9933				1		1																					
City		Site Contact		Lab Contact		Analysis (Attach list if more space is needed)		Special Instructions/Conditions of Receipt																					
CHICAGO		JOHN WEINBERGER		TEREY ROMANO				STANDARD ANALYSIS LIST ON ALL																					
Project Name and Location (State)		Carrier/Waybill Number		Containers & Preservatives																									
RRG/CLAYTON SITE, SAUCET IL HAND DELIVERED BY JW																													
Contract/Purchase Order/Quote No.		Matrix		Matrix																									
CRA MASTER																													
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Date		Time		Air		Aqueous		Sed		Soil		Unpres.		H2SO4		HNO3		HCl		NaOH		ZnAc		NaOH			
59844A-TP-50		05/12/06		12:45								X		I														X	
59844B-TP-50		05/12/06		12:48								X		I														X	
59844C-TP-50		05/12/06		12:54								X		I														X	
59845A-TP-50		05/12/06		12:57								X		I														X	
59845B-TP-50		05/12/06		13:00								X		I														X	
59845C-TP-50		05/12/06		13:06								X		I														X	
59843A-TP-50		05/12/06		13:09								X		I														X	
59843B-TP-50		05/12/06		13:21								X		I														X	
59843C-TP-50		05/12/06		13:24								X		I														X	
59843D-TP-50		05/12/06		13:27								X		I														X	
59845E-TP-50		05/12/06		13:27								X		I														X	
59845F-TP-50		05/12/06		13:27								X		I														X	
59845G-TP-50		05/12/06		13:27								X		I														X	
59845H-TP-50		05/12/06		13:27								X		I														X	
59845I-TP-50		05/12/06		13:27								X		I														X	
59845J-TP-50		05/12/06		13:27								X		I														X	
59845K-TP-50		05/12/06		13:27								X		I														X	
59845L-TP-50		05/12/06		13:27								X		I														X	
59845M-TP-50		05/12/06		13:27								X		I														X	
59845N-TP-50		05/12/06		13:27								X		I														X	
59845O-TP-50		05/12/06		13:27								X		I														X	
59845P-TP-50		05/12/06		13:27								X		I														X	
59845Q-TP-50		05/12/06		13:27								X		I														X	
59845R-TP-50		05/12/06		13:27								X		I														X	
59845S-TP-50		05/12/06		13:27								X		I														X	
59845T-TP-50		05/12/06		13:27								X		I														X	
59845U-TP-50		05/12/06		13:27								X		I														X	
59845V-TP-50		05/12/06		13:27								X		I														X	
59845W-TP-50		05/12/06		13:27								X		I														X	
59845X-TP-50		05/12/06		13:27								X		I														X	
59845Y-TP-50		05/12/06		13:27								X		I														X	
59845Z-TP-50		05/12/06		13:27								X		I														X	
59846A-TP-50		05/12/06		13:27								X		I														X	
59846B-TP-50		05/12/06		13:27								X		I														X	
59846C-TP-50		05/12/06		13:27								X		I														X	
59846D-TP-50		05/12/06		13:27								X		I														X	
59846E-TP-50		05/12/06		13:27								X		I														X	
59846F-TP-50		05/12/06		13:27								X		I														X	
59846G-TP-50		05/12/06		13:27								X		I														X	
59846H-TP-50		05/12/06		13:27								X		I														X	
59846I-TP-50		05/12/06		13:27								X		I														X	
59846J-TP-50		05/12/06		13:27								X		I														X	
59846K-TP-50		05/12/06		13:27								X		I														X	
59846L-TP-50		05/12/06		13:27								X		I														X	
59846M-TP-50		05/12/06		13:27								X		I														X	
59846N-TP-50		05/12/06		13:27								X		I														X	
59846O-TP-50		05/12/06		13:27								X		I														X	
59846P-TP-50		05/12/06		13:27								X		I														X	
59846Q-TP-50		05/12/06		13:27								X		I														X	
59846R-TP-50		05/12/06		13:27								X		I														X	
59846S-TP-50		05/12/06		13:27								X		I														X	
59846T-TP-50		05/12/06		13:27								X		I														X	
59846U-TP-50		05/12/06		13:27								X		I														X	
59846V-TP-50		05/12/06		13:27								X		I														X	
59846W-TP-50		05/12/06		13:27								X		I														X	
59846X-TP-50		05/12/06		13:27								X		I														X	
59846Y-TP-50		05/12/06		13:27								X		I														X	
59846Z-TP-50		05/12/06		13:27								X		I														X	
59847A-TP-50		05/12/06		13:27								X		I														X	
59847B-TP-50		05/12/06		13:27								X		I														X	
59847C-TP-50		05/12/06		13:27								X		I														X	
59847D-TP-50		05/12/06		13:27								X		I														X	
59847E-TP-50		05/12/06		13:27								X		I														X	
59847F-TP-50		05/12/06		13:27								X		I														X	
59847G-TP-50		05/12/06		13:27								X		I														X	
59847H-TP-50		05/12/06		13:27								X		I														X	
59847I-TP-50		05/12/06		13:27								X		I														X	
59847J-TP-50		05/12/06		13:27								X		I														X	
59847K-TP-50		05/12/06		13:27								X		I														X	
59847L-TP-50		05/12/06		13:27								X		I														X	
59847M-TP-50		05/12/06		13:27								X		I														X	
59847N-TP-50		05/12/06		13:27								X		I														X	
59847O-TP-50		05/12/06		13:27								X		I														X	
59847P-TP-50		05/12/06		13:27								X		I														X	
59847Q-TP-50		05/12/06		13:27								X		I														X	
59847R-TP-50		05/12/06		13:27								X		I														X	
59847S-TP-50		05/12/06		13:27								X		I														X	
59847T-TP-50		05/12/06		13:27								X		I														X	
59847U-TP-50		05/12/06		13:27								X		I														X	
59847V-TP-50		05/12/06		13:27								X		I														X	
59847W-TP-50		05/12/06																											



STL St. Louis

Lot #(s): F6E120414

- 2475 -

Client: CRA  
Quote No: 69891

COC/RFA No: 264952  
Initiated By: NM

Condition Upon Receipt Form

Date: 05-12-06  
Time: 1625  
NM  
05-12-06

Shipping Information

Shipper Name: client  
Shipping # (s):\*

Multiple Packages Y ☒ N/A

Sample Temperature (s):\*\*

- |               |           |               |           |
|---------------|-----------|---------------|-----------|
| 1. <u>N/A</u> | 6. _____  | 1. <u>4°C</u> | 6. _____  |
| 2. _____      | 7. _____  | 2. _____      | 7. _____  |
| 3. _____      | 8. _____  | 3. _____      | 8. _____  |
| 4. _____      | 9. _____  | 4. _____      | 9. _____  |
| 5. _____      | 10. _____ | 5. _____      | 10. _____ |

\*Numbered shipping lines correspond to Numbered Sample Temp lines

\*\*Sample must be received at 4°C ± 2°C. If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	Y (N)	Was sample received broken?	8.	Y (N)	Sample received with Chain of Custody?
2.	Y N (N/A)	Was sample received with proper pH <sup>1</sup> ? (If not, make note below)	9.	Y (N)	Chain of Custody matches sample ID's on container(s)?
3.	Y (N)	If N/A- Was pH taken by original STL Lab?	10.	Y (N)	Are there custody seals present on cooler?
4.	Y (N)	Sample received in proper containers?	11.	Y N (N/A)	Do custody seals on cooler appear to be tampered with?
5.	Y (N)	Sample volume sufficient for analysis?	12.	Y (N)	Are there custody seals present on bottles?
6.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	Y N (N/A)	Do custody seals on bottles appear to be tampered with?
7.	Y (N)	Were contents of the cooler were frisked after opening	14.	Y (N)	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: For 59844C-TP-50 the sample label said 59845C-TP-50, but the sample lid matched the chain.

Corrective Action:

- ☐ Client Contact Name: \_\_\_\_\_
- ☐ Sample(s) processed "as is"
- ☐ Sample(s) on hold until: \_\_\_\_\_

Informed by: \_\_\_\_\_

Project Management Review: [Signature]

If released, notify: \_\_\_\_\_  
Date: 05-15-06

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

## APPENDIX J

### ANALYTICAL REPORT FOR STL GC LOCATION SAMPLES



**STL**

**STL St. Louis**  
13715 Rider Trail North  
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757  
www.stl-inc.com

## **ANALYTICAL REPORT**

**PROJECT NO. 42190**

**RRG/Clayton Chemical**

**Lot #: F6D280422**

**Dave Hendren**

**Conestoga-Rovers & Associates**  
8615 W. Bryn Mawr  
Chicago, IL 60631

---

**SEVERN TRENT LABORATORIES, INC.**

  
**Terry Romanko**  
Project Manager

**May 4, 2006**

**Case Narrative**  
LOT NUMBER: F6D280422

This report contains the analytical results for the five samples received under chain of custody by STL St. Louis on April 28, 2006. These samples are associated with your RRG/Clayton Chemical project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by STL St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

**PCBs by GC (8082)**

Batch 6119044:

DCB recovery in this sample's opening CCV (PCAL910) and closing CCV (PCAL915) was above the QC limit on the confirmation channel B. Sample is not being reported from this channel. The method requires 3-5 peaks be used for PCB quantitation. Due to the present of matrix interferences in the sample, only 4 peaks were used for quantitation on channel a.

**Affected Samples:**

F6D280422 (4): 59869-GC-2

Batch 6119044:

DCB surrogate recovery in the opening CCV (PCAL910) for this set of samples was above QC limits. QC and samples affected by this excursion had acceptable surrogate recoveries except for sample - 004, which had high recoveries due to matrix interference.

**Affected Samples:**

F6D280422 (4): 59869-GC-2

F6D280422 (5): 59870-GC-2

Batch 6119044:

The MS/MSD recovery for Aroclor 1016 and 1260, along with the DCB surrogate, is outside the established QC limits. The RPD is within method acceptance criteria indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recovery.

**Affected Samples:**

F6D280422 (1): 59866-GC-2

F6D280422 (4): 59869-GC-2

F6D280422 (2): 59867-GC-2

F6D280422 (5): 59870-GC-2

F6D280422 (3): 59868-GC-2

**Volatile Organics by GC/MS (8260B)**

Batch 6123427:

The samples were analyzed using methanol extraction due to elevated concentrations of target/non-target analytes.

Methylene chloride was observed in the method blank above the reporting limit. Methylene chloride is a recognized potential laboratory contaminant. Concentrations up to five times the level observed in the method blank, in associated laboratory samples, may be attributed to its presence in the laboratory.

The MS/MSD recoveries are outside QC limits for less than 10% of the compounds spiked. Laboratory QC practices, based on federal guidance documents, allow for up to 10% of the spike compounds to be outside QC criteria without necessitating re-preparation/re-analysis. Sample extraction efficiency and compliance is demonstrated by the remaining acceptable LCS.

**Affected Samples:**

F6D280422 (1): 59866-GC-2	F6D280422 (3): 59868-GC-2
F6D280422 (2): 59867-GC-2	

**Batch 6124336:**

The LCS analyte is outside the upper QC limit, indicating a potential positive bias for Iodomethane (135%). This analyte was not observed above the reporting limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The original sample results are provided.

There was insufficient sample volume to perform MS/MSD analysis. A LCS/LCSD were performed to demonstrate accuracy and replicate precision.

The LCS/LCSD RPD is not within method acceptance criteria for Methyl Acetate (24.21), Dichlorodifluoromethane (22.23), Acrolein (34.7), Propionitrile (21.47), Ethyl Acetate (25.66) and 1-Butanol (25.66). LCS/LCSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.

**Affected Samples:**

F6D280422 (4): 59869-GC-2	F6D280422 (5): 59870-GC-2
---------------------------	---------------------------



METHODS SUMMARY

F6D280422

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
PCBs by SW-846 8082	SW846 8082	SW846 3550B/366
Volatile Organics by GC/MS	SW846 8260B	SW846 5035

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",  
EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical  
Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

F6D280422

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED	SAMP
			DATE	TIME
H4D2Q	001	59866-GC-2	04/28/06	13:20
H4D21	002	59867-GC-2	04/28/06	13:25
H4D24	003	59868-GC-2	04/28/06	13:35
H4D3C	004	59869-GC-2	04/28/06	13:45
H4D3G	005	59870-GC-2	04/28/06	13:55

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59866-GC-2

GC/MS Volatiles

Lot-Sample #....: F6D280422-001    Work Order #....: H4D2Q1AD    Matrix.....: SOLID  
Date Sampled....: 04/28/06 13:20    Date Received...: 04/28/06  
Prep Date.....: 05/02/06    Analysis Date...: 05/04/06  
Prep Batch #....: 6123427    Analysis Time...: 11:40  
Dilution Factor: 1  
% Moisture.....: 11    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Chlorobenzene	1800	280	ug/kg	36
1,2-Dichlorobenzene	7100	280	ug/kg	54
1,4-Dichlorobenzene	7200	280	ug/kg	36
Methylene chloride	590 B	280	ug/kg	51
Tetrachloroethene	3200	280	ug/kg	58
Toluene	57000 B,E	280	ug/kg	42
1,2,4-Trimethylbenzene	4300	280	ug/kg	33
m-Xylene & p-Xylene	58000	560	ug/kg	80
Ethylbenzene	17000	280	ug/kg	54
o-Xylene	43000	280	ug/kg	66

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	106	(17 - 150)
Dibromofluoromethane	117	(10 - 150)
1,2-Dichloroethane-d4	117	(19 - 150)
4-Bromofluorobenzene	77	(10 - 150)

NOTE(S) :

- Results and reporting limits have been adjusted for dry weight.
- B Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- E Estimated result. Result concentration exceeds the calibration range.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59866-GC-2

GC/MS Volatiles

Lot-Sample #...: F6D280422-001    Work Order #...: H4D2Q2AD    Matrix.....: SOLID  
Date Sampled...: 04/28/06 13:20    Date Received...: 04/28/06  
Prep Date.....: 05/02/06    Analysis Date...: 05/04/06  
Prep Batch #...: 6123427    Analysis Time...: 13:28  
Dilution Factor: 10  
% Moisture.....: 11    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Toluene	52000 B,D	2800	ug/kg	420
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Toluene-d8	75	(17 - 150)		
Dibromofluoromethane	92	(10 - 150)		
1,2-Dichloroethane-d4	95	(19 - 150)		
4-Bromofluorobenzene	63	(10 - 150)		

**NOTE (S) :**

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

D Result was obtained from the analysis of a dilution.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59866-GC-2

GC Semivolatiles

Lot-Sample #....: F6D280422-001    Work Order #....: H4D2Q1AE    Matrix.....: SOLID  
Date Sampled....: 04/28/06 13:20    Date Received...: 04/28/06  
Prep Date.....: 04/29/06    Analysis Date...: 05/02/06  
Prep Batch #....: 6119044    Analysis Time...: 04:47  
Dilution Factor: 1  
% Moisture.....: 11    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	37	ug/kg	6.9
Aroclor 1260	ND	37	ug/kg	4.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	632 *	(44 - 150)

**NOTE (S) :**

---

\* Surrogate recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59866-GC-2

General Chemistry

Lot-Sample #...: F6D280422-001    Work Order #...: H4D2Q    Matrix.....: SOLID  
Date Sampled...: 04/28/06 13:20    Date Received...: 04/28/06  
% Moisture.....: 11

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	10.7	0.10	%	MCAWW 160.3 MOD	05/01-05/02/06	6121014
		Dilution Factor: 1		Analysis Time...: 00:00	MDL.....:	

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59867-GC-2

GC/MS Volatiles

Lot-Sample #....: F6D280422-002    Work Order #....: H4D211AD    Matrix.....: SOLID  
Date Sampled....: 04/28/06 13:25    Date Received...: 04/28/06 )  
Prep Date.....: 05/02/06    Analysis Date...: 05/04/06  
Prep Batch #....: 6123427    Analysis Time...: 12:16  
Dilution Factor: 1  
% Moisture.....: 14    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Chlorobenzene	1100	290	ug/kg	37
1,2-Dichlorobenzene	5700	290	ug/kg	56
1,4-Dichlorobenzene	5200	290	ug/kg	37
Methylene chloride	610 B	290	ug/kg	53
Tetrachloroethene	2400	290	ug/kg	60
Toluene	43000 B,E	290	ug/kg	43
1,2,4-Trimethylbenzene	1400	290	ug/kg	34
Vinyl chloride	ND	290	ug/kg	150
m-Xylene & p-Xylene	24000	580	ug/kg	83
Ethylbenzene	9500	290	ug/kg	56
o-Xylene	42000	290	ug/kg	68

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	120	(17 - 150)
Dibromofluoromethane	134	(10 - 150)
1,2-Dichloroethane-d4	133	(19 - 150)
4-Bromofluorobenzene	87	(10 - 150)

**NOTE (S) :**

---

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Estimated result. Result concentration exceeds the calibration range.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59867-GC-2

GC/MS Volatiles

Lot-Sample #...: F6D280422-002    Work Order #...: H4D212AD    Matrix.....: SOLID  
Date Sampled...: 04/28/06 13:25    Date Received...: 04/28/06  
Prep Date.....: 05/02/06    Analysis Date...: 05/04/06  
Prep Batch #...: 6123427    Analysis Time...: 14:04  
Dilution Factor: 10  
% Moisture.....: 14    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Toluene	35000 B,D	2900	ug/kg	430
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Toluene-d8	82	(17 - 150)		
Dibromofluoromethane	90	(10 - 150)		
1,2-Dichloroethane-d4	95	(19 - 150)		
4-Bromofluorobenzene	63	(10 - 150)		

**NOTE (S) :**

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

D Result was obtained from the analysis of a dilution.



Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59867-GC-2

GC Semivolatiles

Lot-Sample #....: F6D280422-002    Work Order #....: H4D211AE    Matrix.....: SOLID  
Date Sampled....: 04/28/06 13:25    Date Received...: 04/28/06  
Prep Date.....: 04/29/06    Analysis Date...: 05/02/06  
Prep Batch #....: 6119044    Analysis Time...: 05:20  
Dilution Factor: 1  
% Moisture.....: 14    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Aroclor 1016	ND	38	ug/kg	7.1
Aroclor 1260	ND	38	ug/kg	4.4
SURROGATE	PERCENT		RECOVERY	
	RECOVERY		LIMITS	
Decachlorobiphenyl	701 *		(44 - 150)	

NOTE (S) :  
\* Surrogate recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59867-GC-2

General Chemistry

Lot-Sample #...: F6D280422-002    Work Order #...: H4D21    Matrix.....: SOLID  
Date Sampled...: 04/28/06 13:25    Date Received...: 04/28/06  
% Moisture.....: 14

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	13.6	0.10	%	MCAWW 160.3 MOD	05/01-05/02/06	6121014
		Dilution Factor: 1		Analysis Time...: 00:00	MDL.....:	

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59868-GC-2

GC/MS Volatiles

Lot-Sample #....: F6D280422-003    Work Order #....: H4D241AD    Matrix.....: SOLID  
Date Sampled....: 04/28/06 13:35    Date Received...: 04/28/06  
Prep Date.....: 05/02/06    Analysis Date...: 05/02/06  
Prep Batch #....: 6123427    Analysis Time...: 19:14  
Dilution Factor: 1  
% Moisture.....: 20    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Chlorobenzene	ND	310	ug/kg	40
1,2-Dichlorobenzene	ND	310	ug/kg	60
1,4-Dichlorobenzene	ND	310	ug/kg	40
Methylene chloride	390 B	310	ug/kg	57
Tetrachloroethene	ND	310	ug/kg	65
Toluene	170 J,B	310	ug/kg	47
1,2,4-Trimethylbenzene	780	310	ug/kg	37
Vinyl chloride	ND	310	ug/kg	160
m-Xylene & p-Xylene	560	310	ug/kg	89
Ethylbenzene	86 J	310	ug/kg	60
o-Xylene	320	310	ug/kg	73

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	86	(17 - 150)
Dibromofluoromethane	72	(10 - 150)
1,2-Dichloroethane-d4	83	(19 - 150)
4-Bromofluorobenzene	101	(10 - 150)

NOTE (S) :

Results and reporting limits have been adjusted for dry weight.  
B Method blank contamination. The associated method blank contains the target analyte at a reportable level.  
J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59868-GC-2

GC Semivolatiles

Lot-Sample #....: F6D280422-003    Work Order #....: H4D241AE    Matrix.....: SOLID  
Date Sampled....: 04/28/06 13:35    Date Received...: 04/28/06  
Prep Date.....: 04/29/06    Analysis Date...: 05/02/06  
Prep Batch #....: 6119044    Analysis Time...: 05:52  
Dilution Factor: 1  
% Moisture.....: 20    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	41	ug/kg	7.6
Aroclor 1260	ND	41	ug/kg	4.7
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Decachlorobiphenyl	731 *	(44 - 150)		

NOTE (S) :  
\* Surrogate recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59868-GC-2

General Chemistry

Lot-Sample #...: F6D280422-003    Work Order #...: H4D24    Matrix.....: SOLID  
Date Sampled...: 04/28/06 13:35    Date Received...: 04/28/06  
% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	19.7	0.10	%	MCAWW 160.3 MOD	05/01-05/02/06	6121014
		Dilution Factor: 1		Analysis Time...: 00:00	MDL.....:	

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59869-GC-2

GC/MS Volatiles

Lot-Sample #....: F6D280422-004    Work Order #....: H4D3C1AD    Matrix.....: SOLID  
Date Sampled....: 04/28/06 13:45    Date Received...: 04/28/06  
Prep Date.....: 05/03/06    Analysis Date...: 05/03/06  
Prep Batch #....: 6124336    Analysis Time...: 17:54  
Dilution Factor: 1  
% Moisture.....: 12    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Chlorobenzene	ND	5.7	ug/kg	0.15
1,2-Dichlorobenzene	ND	5.7	ug/kg	0.30
1,4-Dichlorobenzene	ND	5.7	ug/kg	0.27
Methylene chloride	5.5 J	5.7	ug/kg	3.0
Tetrachloroethene	89	5.7	ug/kg	0.44
Toluene	38	5.7	ug/kg	0.65
1,2,4-Trimethylbenzene	ND	5.7	ug/kg	0.24
Vinyl chloride	ND	5.7	ug/kg	0.38
m-Xylene & p-Xylene	12	5.7	ug/kg	0.34
Ethylbenzene	4.6 J	5.7	ug/kg	0.19
o-Xylene	3.7 J	5.7	ug/kg	0.26

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	112	(78 - 136)
Dibromofluoromethane	120	(71 - 142)
1,2-Dichloroethane-d4	125	(62 - 147)
4-Bromofluorobenzene	123	(75 - 133)

**NOTE (S) :**  
Results and reporting limits have been adjusted for dry weight.  
J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59869-GC-2

GC Semivolatiles

Lot-Sample #....: F6D280422-004    Work Order #....: H4D3C1AE    Matrix.....: SOLID  
Date Sampled....: 04/28/06 13:45    Date Received...: 04/28/06  
Prep Date.....: 04/29/06    Analysis Date...: 05/02/06  
Prep Batch #....: 6119044    Analysis Time...: 03:57  
Dilution Factor: 1  
% Moisture.....: 12    Method.....: SW846 8082

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	ND	38	ug/kg	7.0
Aroclor 1260	720	38	ug/kg	4.3
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Decachlorobiphenyl	224 *	(44 - 150)		

NOTE (S) :  
\* Surrogate recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59869-GC-2

General Chemistry

Lot-Sample #...: F6D280422-004    Work Order #...: H4D3C    Matrix.....: SOLID  
Date Sampled...: 04/28/06 13:45    Date Received...: 04/28/06  
% Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	12.1	0.10	%	MCAWW 160.3 MOD	05/01-05/02/06	6121014
		Dilution Factor: 1		Analysis Time...: 00:00	MDL.....:	



Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59870-GC-2

GC/MS Volatiles

Lot-Sample #...: F6D280422-005    Work Order #...: H4D3G1AD    Matrix.....: SOLID  
Date Sampled...: 04/28/06 13:55    Date Received...: 04/28/06  
Prep Date.....: 05/03/06    Analysis Date...: 05/03/06  
Prep Batch #...: 6124336    Analysis Time...: 18:31  
Dilution Factor: 1  
% Moisture.....: 19    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Chlorobenzene	ND	6.2	ug/kg	0.16
1,2-Dichlorobenzene	1.1 J	6.2	ug/kg	0.32
1,4-Dichlorobenzene	ND	6.2	ug/kg	0.30
Methylene chloride	130	6.2	ug/kg	3.3
Tetrachloroethene	210	6.2	ug/kg	0.48
Toluene	89	6.2	ug/kg	0.70
1,2,4-Trimethylbenzene	52	6.2	ug/kg	0.26
Vinyl chloride	33	6.2	ug/kg	0.41
m-Xylene & p-Xylene	270	6.2	ug/kg	0.37
Ethylbenzene	92	6.2	ug/kg	0.21
o-Xylene	110	6.2	ug/kg	0.28

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	117	(78 - 136)
Dibromofluoromethane	108	(71 - 142)
1,2-Dichloroethane-d4	124	(62 - 147)
4-Bromofluorobenzene	101	(75 - 133)

**NOTE (S) :**

---

Results and reporting limits have been adjusted for dry weight.  
J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59870-GC-2

GC Semivolatiles

Lot-Sample #....: F6D280422-005    Work Order #....: H4D3G1AE    Matrix.....: SOLID  
Date Sampled....: 04/28/06 13:55    Date Received...: 04/28/06  
Prep Date.....: 04/29/06    Analysis Date...: 05/02/06  
Prep Batch #....: 6119044    Analysis Time...: 04:13  
Dilution Factor: 1  
% Moisture.....: 19    Method.....: SW846 8082

		REPORTING		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
Aroclor 1016	ND	41	ug/kg	7.6
Aroclor 1260	ND	41	ug/kg	4.7
	PERCENT	RECOVERY		
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
Decachlorobiphenyl	120	(44 - 150)		

**NOTE (S) :**  
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: 59870-GC-2

General Chemistry

Lot-Sample #...: F6D280422-005    Work Order #...: H4D3G    Matrix.....: SOLID  
Date Sampled...: 04/28/06 13:55    Date Received...: 04/28/06  
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	19.1	0.10	%	MCAWW 160.3 MOD	05/01-05/02/06	6121014
		Dilution Factor: 1		Analysis Time...: 00:00	MDL.....:	

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F6D280422  
MB Lot-Sample #: F6E030000-427  
Analysis Date...: 05/02/06  
Dilution Factor: 1

Work Order #...: H4L1X1AA  
Prep Date.....: 05/02/06  
Prep Batch #...: 6123427

Matrix.....: SOLID  
Analysis Time...: 11:42

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Chlorobenzene	ND	250	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	250	ug/kg	SW846 8260B
Ethylbenzene	ND	250	ug/kg	SW846 8260B
Methylene chloride	550	250	ug/kg	SW846 8260B
Tetrachloroethene	ND	250	ug/kg	SW846 8260B
Toluene	200 J	250	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	250	ug/kg	SW846 8260B
Vinyl chloride	ND	250	ug/kg	SW846 8260B
o-Xylene	ND	250	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	250	ug/kg	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	96	(17 - 150)
Dibromofluoromethane	95	(10 - 150)
1,2-Dichloroethane-d4	103	(19 - 150)
4-Bromofluorobenzene	113	(10 - 150)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: F6D280422

Work Order #...: H4PVC1AA

Matrix.....: SOLID

MB Lot-Sample #: F6E040000-336

Prep Date.....: 05/03/06

Analysis Time...: 14:37

Analysis Date...: 05/03/06

Prep Batch #...: 6124336

Dilution Factor: 1

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
o-Xylene	ND	5.0	ug/kg	SW846 8260B
m-Xylene & p-Xylene	ND	5.0	ug/kg	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	88	(78 - 136)
Dibromofluoromethane	87	(71 - 142)
1,2-Dichloroethane-d4	93	(62 - 147)
4-Bromofluorobenzene	101	(75 - 133)

NOTE (S) :

---

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: F6D280422  
MB Lot-Sample #: F6D290000-044  
Analysis Date...: 05/02/06  
Dilution Factor: 1

Work Order #...: H4D9H1AA  
Prep Date.....: 04/29/06  
Prep Batch #...: 6119044

Matrix.....: SOLID  
Analysis Time...: 03:24

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
Aroclor 1016	ND	33	ug/kg	SW846 8082
Aroclor 1260	ND	33	ug/kg	SW846 8082
		PERCENT	RECOVERY	
SURROGATE	RECOVERY	LIMITS		
Decachlorobiphenyl	123	(44 - 150)		

NOTE (S) :

---

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F6D280422      Work Order #...: H4L1X1AC      Matrix.....: SOLID  
LCS Lot-Sample#: F6E030000-427  
Prep Date.....: 05/02/06      Analysis Date...: 05/02/06  
Prep Batch #...: 6123427      Analysis Time...: 10:45  
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Vinyl chloride	101	(53 - 127)	SW846 8260B
Methylene chloride	94	(52 - 150)	SW846 8260B
Toluene	102	(68 - 131)	SW846 8260B
m-Xylene & p-Xylene	96	(84 - 121)	SW846 8260B
o-Xylene	100	(76 - 127)	SW846 8260B
1,4-Dichlorobenzene	86	(78 - 114)	SW846 8260B
1,2-Dichlorobenzene	93	(81 - 117)	SW846 8260B
Chlorobenzene	91	(83 - 116)	SW846 8260B
Tetrachloroethene	81	(65 - 117)	SW846 8260B
Ethylbenzene	96	(84 - 119)	SW846 8260B
cis-1,3-Dichloropropene	103	(71 - 130)	SW846 8260B
Dibromochloromethane	98	(63 - 131)	SW846 8260B
Chloromethane	105	(50 - 136)	SW846 8260B
Bromomethane	59	(40 - 117)	SW846 8260B
Chloroethane	89	(65 - 150)	SW846 8260B
Acetone	67	(52 - 150)	SW846 8260B
1,1-Dichloroethene	80	(57 - 127)	SW846 8260B
Carbon disulfide	108	(46 - 150)	SW846 8260B
1,1-Dichloroethane	98	(72 - 119)	SW846 8260B
2-Butanone	108	(70 - 150)	SW846 8260B
1,2-Dichloroethene (total)	91	(71 - 124)	SW846 8260B
Chloroform	92	(72 - 121)	SW846 8260B
1,1,1-Trichloroethane	88	(68 - 128)	SW846 8260B
Carbon tetrachloride	84	(61 - 136)	SW846 8260B
1,2-Dichloroethane	95	(68 - 125)	SW846 8260B
Benzene	98	(82 - 116)	SW846 8260B
Trichloroethene	82	(68 - 118)	SW846 8260B
1,2-Dichloropropane	98	(80 - 121)	SW846 8260B
Bromochloromethane	88	(65 - 133)	SW846 8260B
1,1,2-Trichloroethane	96	(74 - 118)	SW846 8260B
trans-1,3-Dichloropropene	104	(71 - 145)	SW846 8260B
1,3-Dichlorobenzene	94	(79 - 119)	SW846 8260B
2-Hexanone	125	(55 - 145)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F6D280422      Work Order #....: H4L1X1AC      Matrix.....: SOLID  
LCS Lot-Sample#: F6E030000-427

<u>PARAMETER</u>	PERCENT	RECOVERY	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
4-Methyl-2-pentanone	119	(51 - 141)	SW846 8260B
Xylenes (total)	97	(82 - 122)	SW846 8260B
Styrene	103	(74 - 129)	SW846 8260B
Bromoform	104	(62 - 130)	SW846 8260B
1,1,2,2-Tetrachloroethane	117	(74 - 129)	SW846 8260B
Bromodichloromethane	101	(69 - 123)	SW846 8260B

<u>SURROGATE</u>	PERCENT	RECOVERY
	<u>RECOVERY</u>	<u>LIMITS</u>
Toluene-d8	101	(76 - 126)
Dibromofluoromethane	90	(81 - 119)
1,2-Dichloroethane-d4	103	(77 - 120)
4-Bromofluorobenzene	111	(76 - 131)

**NOTE (S) :**

---

Calculations are performed before rounding to avoid round-off errors in calculated results.  
Bold print denotes control parameters



LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F6D280422

Work Order #...: H4PVC1AC-LCS

Matrix.....: SOLID

LCS Lot-Sample#: F6E040000-336

H4PVC1AD-LCSD

Prep Date.....: 05/03/06

Analysis Date...: 05/03/06

Prep Batch #...: 6124336

Analysis Time...: 12:06

Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Vinyl chloride	94	(51 - 145)			SW846 8260B
	110	(51 - 145)	15	(0-20)	SW846 8260B
Methylene chloride	98	(54 - 150)			SW846 8260B
	93	(54 - 150)	5.6	(0-20)	SW846 8260B
Toluene	99	(72 - 131)			SW846 8260B
	96	(72 - 131)	2.8	(0-20)	SW846 8260B
m-Xylene & p-Xylene	103	(79 - 127)			SW846 8260B
	96	(79 - 127)	6.7	(0-20)	SW846 8260B
o-Xylene	101	(76 - 128)			SW846 8260B
	95	(76 - 128)	6.0	(0-20)	SW846 8260B
1,4-Dichlorobenzene	99	(77 - 116)			SW846 8260B
	100	(77 - 116)	0.60	(0-20)	SW846 8260B
Chlorobenzene	94	(77 - 123)			SW846 8260B
	95	(77 - 123)	0.93	(0-20)	SW846 8260B
Ethylbenzene	100	(78 - 126)			SW846 8260B
	96	(78 - 126)	4.5	(0-20)	SW846 8260B
Tetrachloroethene	94	(70 - 129)			SW846 8260B
	98	(70 - 129)	4.9	(0-20)	SW846 8260B
1,2-Dichlorobenzene	102	(79 - 121)			SW846 8260B
	101	(79 - 121)	0.94	(0-20)	SW846 8260B
cis-1,3-Dichloropropene	97	(73 - 128)			SW846 8260B
	93	(73 - 128)	4.6	(0-20)	SW846 8260B
Dibromochloromethane	113	(72 - 132)			SW846 8260B
	105	(72 - 132)	7.5	(0-20)	SW846 8260B
Chloromethane	77	(53 - 134)			SW846 8260B
	87	(53 - 134)	11	(0-20)	SW846 8260B
Bromomethane	94	(40 - 116)			SW846 8260B
	96	(40 - 116)	2.7	(0-20)	SW846 8260B
Chloroethane	90	(66 - 140)			SW846 8260B
	94	(66 - 140)	4.7	(0-20)	SW846 8260B
Acetone	98	(45 - 150)			SW846 8260B
	87	(45 - 150)	12	(0-20)	SW846 8260B
1,1-Dichloroethene	88	(61 - 131)			SW846 8260B
	91	(61 - 131)	3.8	(0-20)	SW846 8260B
Carbon disulfide	105	(55 - 150)			SW846 8260B
	105	(55 - 150)	0.30	(0-20)	SW846 8260B
1,1-Dichloroethane	95	(75 - 127)			SW846 8260B
	91	(75 - 127)	4.5	(0-20)	SW846 8260B
2-Butanone	113	(56 - 150)			SW846 8260B
	93	(56 - 150)	20	(0-20)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F6D280422      Work Order #...: H4PVC1AC-LCS      Matrix.....: SOLID  
LCS Lot-Sample#: F6E040000-336      H4PVC1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2-Dichloroethene (total)	97	(74 - 129)			SW846 8260B
	91	(74 - 129)	6.9	(0-20)	SW846 8260B
Chloroform	100	(77 - 129)			SW846 8260B
	93	(77 - 129)	6.9	(0-20)	SW846 8260B
1,1,1-Trichloroethane	97	(74 - 135)			SW846 8260B
	95	(74 - 135)	2.2	(0-20)	SW846 8260B
Carbon tetrachloride	100	(72 - 135)			SW846 8260B
	97	(72 - 135)	2.3	(0-20)	SW846 8260B
1,2-Dichloroethane	99	(69 - 131)			SW846 8260B
	93	(69 - 131)	6.9	(0-20)	SW846 8260B
Benzene	103	(77 - 123)			SW846 8260B
	100	(77 - 123)	2.4	(0-20)	SW846 8260B
Trichloroethene	97	(75 - 120)			SW846 8260B
	98	(75 - 120)	0.65	(0-20)	SW846 8260B
1,2-Dichloropropane	94	(72 - 128)			SW846 8260B
	94	(72 - 128)	0.57	(0-20)	SW846 8260B
Bromodichloromethane	104	(72 - 125)			SW846 8260B
	98	(72 - 125)	5.1	(0-20)	SW846 8260B
1,1,2-Trichloroethane	98	(66 - 132)			SW846 8260B
	91	(66 - 132)	7.0	(0-20)	SW846 8260B
trans-1,3-Dichloropropene	100	(72 - 146)			SW846 8260B
	93	(72 - 146)	7.3	(0-20)	SW846 8260B
1,3-Dichlorobenzene	102	(78 - 121)			SW846 8260B
	98	(78 - 121)	4.4	(0-20)	SW846 8260B
2-Hexanone	114	(52 - 150)			SW846 8260B
	96	(52 - 150)	17	(0-20)	SW846 8260B
4-Methyl-2-pentanone	116	(70 - 143)			SW846 8260B
	97	(70 - 143)	17	(0-20)	SW846 8260B
Bromoform	101	(68 - 136)			SW846 8260B
	96	(68 - 136)	5.2	(0-20)	SW846 8260B
Styrene	106	(75 - 129)			SW846 8260B
	101	(75 - 129)	5.1	(0-20)	SW846 8260B
1,1,2,2-Tetrachloroethane	101	(75 - 136)			SW846 8260B
	90	(75 - 136)	11	(0-20)	SW846 8260B
Bromobenzene	109	(74 - 126)			SW846 8260B
	107	(74 - 126)	1.1	(0-20)	SW846 8260B
Bromochloromethane	93	(68 - 135)			SW846 8260B
	89	(68 - 135)	4.0	(0-20)	SW846 8260B
n-Butylbenzene	107	(71 - 138)			SW846 8260B
	96	(71 - 138)	11	(0-20)	SW846 8260B

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F6D280422      Work Order #...: H4PVC1AC-LCS      Matrix.....: SOLID  
LCS Lot-Sample#: F6E040000-336      H4PVC1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
sec-Butylbenzene	103	(68 - 130)			SW846 8260B
	99	(68 - 130)	4.2	(0-20)	SW846 8260B
tert-Butylbenzene	106	(67 - 128)			SW846 8260B
	100	(67 - 128)	5.9	(0-20)	SW846 8260B
Allyl chloride	97	(66 - 150)			SW846 8260B
	96	(66 - 150)	0.49	(0-20)	SW846 8260B
2-Chlorotoluene	100	(70 - 134)			SW846 8260B
	93	(70 - 134)	7.5	(0-20)	SW846 8260B
4-Chlorotoluene	101	(70 - 133)			SW846 8260B
	108	(70 - 133)	7.1	(0-20)	SW846 8260B
Cyclohexanone	116	(59 - 150)			SW846 8260B
	95	(59 - 150)	20	(0-20)	SW846 8260B
1,2-Dibromo-3- chloropropane (DBCP)	110	(60 - 145)			SW846 8260B
	99	(60 - 145)	11	(0-20)	SW846 8260B
1,2-Dibromoethane (EDB)	105	(71 - 133)			SW846 8260B
	95	(71 - 133)	10	(0-20)	SW846 8260B
trans-1,4-Dichloro- 2-butene	104	(57 - 121)			SW846 8260B
	94	(57 - 121)	9.8	(0-20)	SW846 8260B
Dichlorodifluoromethane (Freon 12)	69	(50 - 150)			SW846 8260B
	86 p	(50 - 150)	22	(0-20)	SW846 8260B
cis-1,2-Dichloroethene	96	(74 - 127)			SW846 8260B
	91	(74 - 127)	5.4	(0-20)	SW846 8260B
trans-1,2-Dichloroethene	98	(70 - 134)			SW846 8260B
	90	(70 - 134)	8.4	(0-20)	SW846 8260B
1,3-Dichloropropane	96	(69 - 131)			SW846 8260B
	92	(69 - 131)	4.2	(0-20)	SW846 8260B
2,2-Dichloropropane	94	(70 - 143)			SW846 8260B
	94	(70 - 143)	0.040	(0-20)	SW846 8260B
1,1-Dichloropropene	93	(78 - 127)			SW846 8260B
	93	(78 - 127)	0.73	(0-20)	SW846 8260B
Ethyl methacrylate	108	(60 - 139)			SW846 8260B
	99	(60 - 139)	8.8	(0-20)	SW846 8260B
Freon 113	89	(62 - 150)			SW846 8260B
	93	(62 - 150)	4.5	(0-20)	SW846 8260B
Hexachlorobutadiene	116	(62 - 137)			SW846 8260B
	96	(62 - 137)	19	(0-20)	SW846 8260B

(Continued on next page)

## GC/MS Volatiles

LOT# F6D280422

LOT# F6D280422

31 of 40

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F6D280422      Work Order #...: H4PVC1AC-LCS      Matrix.....: SOLID  
LCS Lot-Sample#: F6E040000-336      H4PVC1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Iodomethane	135 a	(70 - 130)			SW846 8260B
	124	(70 - 130)	8.7	(0-20)	SW846 8260B
Vinyl acetate	124	(70 - 130)			SW846 8260B
	105	(70 - 130)	17	(0-20)	SW846 8260B
Acrolein	102	(70 - 130)			SW846 8260B
	72 p	(70 - 130)	35	(0-20)	SW846 8260B
Acrylonitrile	114	(70 - 130)			SW846 8260B
	94	(70 - 130)	19	(0-20)	SW846 8260B
Cyclohexane	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	2.1	(0-20)	SW846 8260B
Isobutanol	116	(70 - 130)			SW846 8260B
	95	(70 - 130)	20	(0-20)	SW846 8260B
Methacrylonitrile	114	(70 - 130)			SW846 8260B
	97	(70 - 130)	16	(0-20)	SW846 8260B
Methylcyclohexane	101	(70 - 130)			SW846 8260B
	102	(70 - 130)	0.69	(0-20)	SW846 8260B
Propionitrile	123	(70 - 130)			SW846 8260B
	99 p	(70 - 130)	21	(0-20)	SW846 8260B
1,4-Dioxane	110	(70 - 130)			SW846 8260B
	96	(70 - 130)	14	(0-20)	SW846 8260B
Pentachloroethane	111	(70 - 130)			SW846 8260B
	109	(70 - 130)	2.1	(0-20)	SW846 8260B
Methyl acetate	123	(70 - 130)			SW846 8260B
	96 p	(70 - 130)	24	(0-20)	SW846 8260B
2-Chloro-1,3-butadiene	102	(70 - 130)			SW846 8260B
	101	(70 - 130)	0.94	(0-20)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Toluene-d8	94	(79 - 128)
	94	(79 - 128)
Dibromofluoromethane	97	(76 - 130)
	92	(76 - 130)
1,2-Dichloroethane-d4	103	(72 - 131)
	94	(72 - 131)
4-Bromofluorobenzene	100	(78 - 126)
	100	(78 - 126)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.  
Bold print denotes control parameters  
p Relative percent difference (RPD) is outside stated control limits.  
a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F6D280422      Work Order #...: H4D9H1AC      Matrix.....: SOLID  
LCS Lot-Sample#: F6D290000-044  
Prep Date.....: 04/29/06      Analysis Date...: 05/02/06  
Prep Batch #...: 6119044      Analysis Time...: 03:40  
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Aroclor 1016	96	(68 - 145)	SW846 8082
Aroclor 1260	100	(73 - 137)	SW846 8082

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Decachlorobiphenyl	123	(66 - 159)

**NOTE (S) :**

---

Calculations are performed before rounding to avoid round-off errors in calculated results.  
Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F6D280422      Work Order #...: H4D241AK-MS      Matrix.....: SOLID  
MS Lot-Sample #: F6D280422-003      H4D241AL-MSD  
Date Sampled...: 04/28/06 13:35      Date Received...: 04/28/06  
Prep Date.....: 05/02/06      Analysis Date...: 05/02/06  
Prep Batch #...: 6123427      Analysis Time...: 19:42  
Dilution Factor: 1      % Moisture.....: 20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Vinyl chloride	111	(49 - 119)			SW846 8260B
	117	(49 - 119)	1.0	(0-30)	SW846 8260B
Methylene chloride	70	(29 - 150)			SW846 8260B
	71	(29 - 150)	1.5	(0-30)	SW846 8260B
Toluene	98	(54 - 143)			SW846 8260B
	100	(54 - 143)	1.8	(0-30)	SW846 8260B
m-Xylene & p-Xylene	93	(65 - 136)			SW846 8260B
	92	(65 - 136)	5.1	(0-30)	SW846 8260B
o-Xylene	98	(65 - 137)			SW846 8260B
	96	(65 - 137)	5.9	(0-30)	SW846 8260B
1,4-Dichlorobenzene	84	(73 - 116)			SW846 8260B
	86	(73 - 116)	1.8	(0-30)	SW846 8260B
1,2-Dichlorobenzene	83	(73 - 123)			SW846 8260B
	86	(73 - 123)	0.41	(0-30)	SW846 8260B
Chlorobenzene	88	(76 - 121)			SW846 8260B
	87	(76 - 121)	5.6	(0-30)	SW846 8260B
Tetrachloroethene	82	(44 - 123)			SW846 8260B
	84	(44 - 123)	1.8	(0-30)	SW846 8260B
Ethylbenzene	95	(69 - 128)			SW846 8260B
	93	(69 - 128)	5.9	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	100	(61 - 136)			SW846 8260B
	106	(61 - 136)	1.3	(0-30)	SW846 8260B
Dibromochloromethane	95	(56 - 137)			SW846 8260B
	94	(56 - 137)	4.8	(0-30)	SW846 8260B
Chloromethane	105	(30 - 121)			SW846 8260B
	110	(30 - 121)	1.4	(0-30)	SW846 8260B
Bromomethane	37	(30 - 102)			SW846 8260B
	38	(30 - 102)	2.7	(0-30)	SW846 8260B
Chloroethane	7.3 a	(25 - 150)			SW846 8260B
	7.1 a	(25 - 150)	5.7	(0-30)	SW846 8260B
Acetone	66	(51 - 150)			SW846 8260B
	71	(51 - 150)	3.0	(0-30)	SW846 8260B
1,1-Dichloroethene	76	(47 - 141)			SW846 8260B
	76	(47 - 141)	4.5	(0-30)	SW846 8260B
Carbon disulfide	101	(41 - 150)			SW846 8260B
	100	(41 - 150)	4.9	(0-30)	SW846 8260B
1,1-Dichloroethane	96	(66 - 125)			SW846 8260B
	101	(66 - 125)	0.95	(0-30)	SW846 8260B
2-Butanone	121	(65 - 150)			SW846 8260B
	115	(65 - 150)	8.6	(0-30)	SW846 8260B

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F6D280422      Work Order #...: H4D241AK-MS      Matrix.....: SOLID  
MS Lot-Sample #: F6D280422-003      H4D241AL-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2-Dichloroethene (total)	89	(69 - 126)			SW846 8260B
	91	(69 - 126)	1.0	(0-30)	SW846 8260B
Chloroform	89	(57 - 135)			SW846 8260B
	93	(57 - 135)	0.34	(0-30)	SW846 8260B
1,1,1-Trichloroethane	83	(50 - 148)			SW846 8260B
	86	(50 - 148)	0.62	(0-30)	SW846 8260B
Carbon tetrachloride	79	(46 - 150)			SW846 8260B
	81	(46 - 150)	2.2	(0-30)	SW846 8260B
1,2-Dichloroethane	93	(58 - 137)			SW846 8260B
	96	(58 - 137)	1.4	(0-30)	SW846 8260B
Benzene	96	(72 - 127)			SW846 8260B
	99	(72 - 127)	0.28	(0-30)	SW846 8260B
Trichloroethene	78	(54 - 150)			SW846 8260B
	78	(54 - 150)	3.4	(0-30)	SW846 8260B
1,2-Dichloropropane	99	(64 - 134)			SW846 8260B
	103	(64 - 134)	0.03	(0-30)	SW846 8260B
Bromodichloromethane	95	(59 - 129)			SW846 8260B
	98	(59 - 129)	1.1	(0-30)	SW846 8260B
Bromochloromethane	82	(56 - 142)			SW846 8260B
	84	(56 - 142)	1.7	(0-30)	SW846 8260B
1,1,2-Trichloroethane	98	(54 - 138)			SW846 8260B
	99	(54 - 138)	3.1	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	107	(58 - 150)			SW846 8260B
	109	(58 - 150)	1.8	(0-30)	SW846 8260B
1,3-Dichlorobenzene	92	(70 - 123)			SW846 8260B
	95	(70 - 123)	1.6	(0-30)	SW846 8260B
2-Hexanone	137	(64 - 150)			SW846 8260B
	132	(64 - 150)	8.2	(0-30)	SW846 8260B
4-Methyl-2-pentanone	130	(46 - 149)			SW846 8260B
	131	(46 - 149)	2.9	(0-30)	SW846 8260B
Xylenes (total)	104 a	(69 - 133)			SW846 8260B
	102 a	(69 - 133)	5.4	(0-30)	SW846 8260B
Styrene	98	(65 - 135)			SW846 8260B
	96	(65 - 135)	6.2	(0-30)	SW846 8260B
Bromoform	104	(52 - 139)			SW846 8260B
	104	(52 - 139)	4.0	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	123	(51 - 142)			SW846 8260B
	124	(51 - 142)	3.1	(0-30)	SW846 8260B

(Continued on next page)



MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: F6D280422      Work Order #...: H4D241AK-MS      Matrix.....: SOLID  
MS Lot-Sample #: F6D280422-003      H4D241AL-MSD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Toluene-d8	93	(17 - 150)
	94	(17 - 150)
Dibromofluoromethane	79	(10 - 150)
	80	(10 - 150)
1,2-Dichloroethane-d4	91	(19 - 150)
	92	(19 - 150)
4-Bromofluorobenzene	109	(10 - 150)
	112	(10 - 150)

**NOTE (S) :**

---

Calculations are performed before rounding to avoid round-off errors in calculated results.  
Bold print denotes control parameters  
Results and reporting limits have been adjusted for dry weight.  
a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #...: F6D280422      Work Order #...: H4D241AH-MS      Matrix.....: SOLID  
MS Lot-Sample #: F6D280422-003      H4D241AJ-MSD  
Date Sampled...: 04/28/06 13:35      Date Received...: 04/28/06  
Prep Date.....: 04/29/06      Analysis Date...: 05/02/06  
Prep Batch #...: 6119044      Analysis Time...: 11:00  
Dilution Factor: 1      % Moisture.....: 20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Aroclor 1016	282 a	(55 - 146)			SW846 8082
	234 a	(55 - 146)	19	(0-30)	SW846 8082
Aroclor 1260	3770 a	(35 - 150)			SW846 8082
	3010 a	(35 - 150)	23	(0-30)	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	656 *	(44 - 150)
	559 *	(44 - 150)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.  
Bold print denotes control parameters  
a Spiked analyte recovery is outside stated control limits.  
Results and reporting limits have been adjusted for dry weight.  
\* Surrogate recovery is outside stated control limits.

## General Chemistry

Matrix.....: SOLID

```
% Moisture.....: 16
```

		DUPLICATE		RPD		PREPARATION-		PREP
PARAM	RESULT	RESULT	UNITS	RPD	LIMIT	METHOD	ANALYSIS DATE	BATCH #
Percent Moisture						SD Lot-Sample #:	F6D290210-002	
	16.2	21.8	%	29	(0-30)	MCAWW 160.3 MOD	05/01-05/02/06	6121014
Dilution Factor: 1				Analysis Time... 00:00				



COR #2347

Chain of Custody Record

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: CRA

Address: 8615 WEST BRYN MAWR

City: CHICAGO

State: IL

Zip Code: 60631

Project Name and Location (State): RRG/CLAYTON - SAUGEY, IL

Contract/Purchase Order/Quote No.

Project Manager: DAVE HENDREN

Telephone Number (Area Code)/Fax Number

Date: 4/28/06

Chain of Custody Number: 264949

Page 1 of 1

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Analysis (Attach list if more space is needed)		Special Instructions/ Conditions of Receipt
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	SELECT PCB	SELECT VOC	
59866-GC-2'	4/28/06	13:20				X	4					X	X	04-28-06	
59867-GC-2'		13:25				X	4					X	X	120g, 3xenc	
59868-GC-2'		13:35				X	9					X	X	2x100g, 7enc MS/MSD	
59869-GC-2'		13:45				X	4					X	X	120g, 3xenc	
59870-GC-2'		13:55				X	4					X	X		

Possible Hazard Identification

Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months ☐ (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ☐

1. Relinquished By: [Signature] Date: 4/28/06 Time: 16:00

2. Relinquished By: [Signature] Date: [ ] Time: [ ]

3. Relinquished By: [ ] Date: [ ] Time: [ ]

QC Requirements (Specify)

1. Received By: [Signature] Date: 04-28-06 Time: 16:00

2. Received By: [ ] Date: [ ] Time: [ ]

3. Received By: [ ] Date: [ ] Time: [ ]

Comments: VOCs will need A DILUTION

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Slays with the Sample; PINK - Field Copy

